EVALUATION OF SHORT-TERM NO$_x$ PLUME MODELS FOR POINT SOURCES
Volume 2. Data

by

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INDEX

Description/Date	Document Pages	Fiche#	Starting Row & Column
Title, Index and Preface Pages	1-6	001	B-1
Part I - Meteorology Research, Incorporated Data	7	001	B-7
Map 1 602/7-1-76	8-39	001	B-8
Map 2 603/7-2-76	40-71	001	C-20
Map 3 603/7-3-76	72-103	001	C-12
Map 4 607/7-5-76	104-134	001	G-4
Map 4 608/7-7-76	135-163	001	G-15
Map 5 609/7-7-76	164-146	001	M-6
Map 5 613/7-14-76	147-157	001	I-7
Map 6 613/7-14-76	158-182	001	I-10
Map 7 614/7-14-76	188-208	001	K-8
Map 8 616/7-15-76	209-219	001	L-8
Map 8 616/7-15-76	220-230	001	L-20
Map 7 619/7-18-76	231-241	001	M-11
Map 8 620/7-18-76	242-252	002	B-4
Map 9 619/7-18-76	253-263	002	B-15
Map 9 621/7-18-76	264-274	002	C-6
Map 10 620/7-18-76	275-285	002	C-17
Map 11 621/7-18-76	286-296	002	D-8
Map 10 622/7-20-76	297-301	002	D-19
Map 12 622/7-20-76	306-329	002	E-10
Map 11 625/7-23-76	330-340	002	F-12
Map 12 626/7-23-76	341-351	002	G-3
Map 13 623/7-23-76	352-372	002	G-14
Map 14 624/7-23-76	373-383	002	M-15
Map 15 627/7-24-76	384-385	002	I-6
Map 13 632/7-26-76	386-406	002	I-18
Map 16 632/7-26-76	407-417	002	J-9
Map 14 634/7-27-76	418-428	002	J-20
Map 17 634/7-27-76	429-439	002	K-11
Map 15 635/7-28-76	440-450	002	L-2
Map 18 635/7-28-76	451-471	002	L-13
Map 19 636/7-28-76	472-482	002	M-14
Map 16 637/7-30-76	483-493	003	B-7
Map 20 637/7-30-76	494-514	003	B-18
Map 21 638/7-30-76	517-535	003	C-10
Part II - University of Washington Data	536	003	D-20
Map 1 6-27-76	537-548	003	E-9
Map 2 7-5-76	549-554	003	E-13
Map 3 7-5-76	555-560	003	E-19
Map 2 7-5-76	561-566	003	F-6
Map 3 7-7-76	567-572	003	F-11
Map 4 7-7-76	573-583	003	F-17
Map 4 7-8-76	584-589	003	G-8
Map 5 7-8-76	595-600	003	G-14

Description/Date		Document Pages	Fiche #	Starting Row and Column
Rep 5	7-09/10-76	601-606	[illegible]	H-5
Rep 6	7-09/10-76	607-612	[illegible]	H-11
Rep 6	7-12-76	613-618	[illegible]	H-17
Rep 7	7-12-76	619-624	[illegible]	I-3
Rep 8	7-13-76	625-630	[illegible]	I-9
Rep 7	7-14-76	631-636	[illegible]	I-15
Rep 9	7-14-76	637-642	[illegible]	J-1
Rep 8	7-15-76	643-648	[illegible]	J-7
Rep 10	7-15-76	649-659	[illegible]	J-13
Rep 9	7-16-76	660-665	[illegible]	K-4
Rep 10	7-16-76	666-671	[illegible]	K-10
Rep 11	7-19-76	672-677	[illegible]	K-16
Rep 12	7-19-76	678-683	[illegible]	L-2
Rep 13	7-20-76	684-689	[illegible]	L-8
Rep 13	7-22-76	690-695	[illegible]	L-14
Rep 12	7-23-76	696-701	[illegible]	L-20
Rep 14	7-23-76	702-707	[illegible]	M-6
Rep 15	8-3-76	708-713	[illegible]	M-12
Form 2320-1		714	[illegible]	M-18

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ABSTRACT

In this volume, all data collected by Meteorology Research, Incorporated and the University of Washington during the NIMTT program are plotted. These include maps showing aircraft flight paths and graphs of data collected along the paths.

Foreword

In this volume, all data collected by Meteorology Research, Incorporated and the University of Washington during the MESIT program are plotted.

For each day, there are one or more maps showing aircraft flight paths and, following the maps, graphs of data collected along the paths. The direction of flight for each path is labelled on the map and corresponding graphs (e.g., traverse five 1715). Each map also shows locations of either traverses through a plume or background traverses and spirals on a given day.

On each spiral graph, the abscissa of the graph indicates the time, type of sampling pass, and map reference. The ordinate of the graph indicates the altitude, in meters, of the airplane above mean sea level. On traverse and background graphs, the ordinate of the graph indicates the time, type of sampling pass, and map references. The abscissa indicates the altitude and length of the pass.

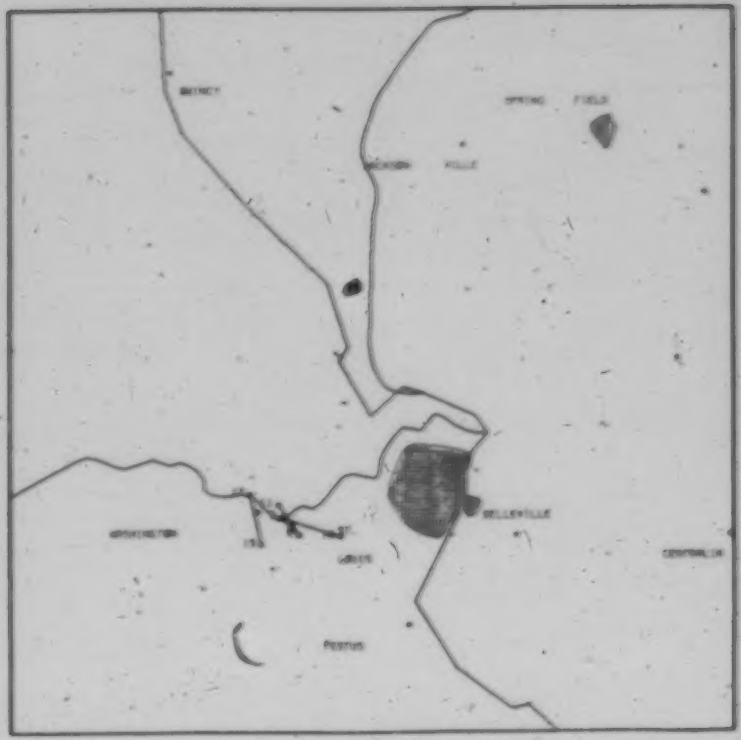
For traverse graphs, the length of the graph matches the length of the path on the corresponding map. Also shown in each traverse graph are the wind speed and direction measured within a few minutes of the traverse time at the traverse altitude. The actual wind speed and direction are given, in standard meteorological convention, as well as the direction of the wind with respect to the flight path. If the abscissa of a graph is oriented along flight path, the arrow at the top of the graph shows wind direction with respect to that path. For a traverse, the relative wind direction should usually be close to 90°.

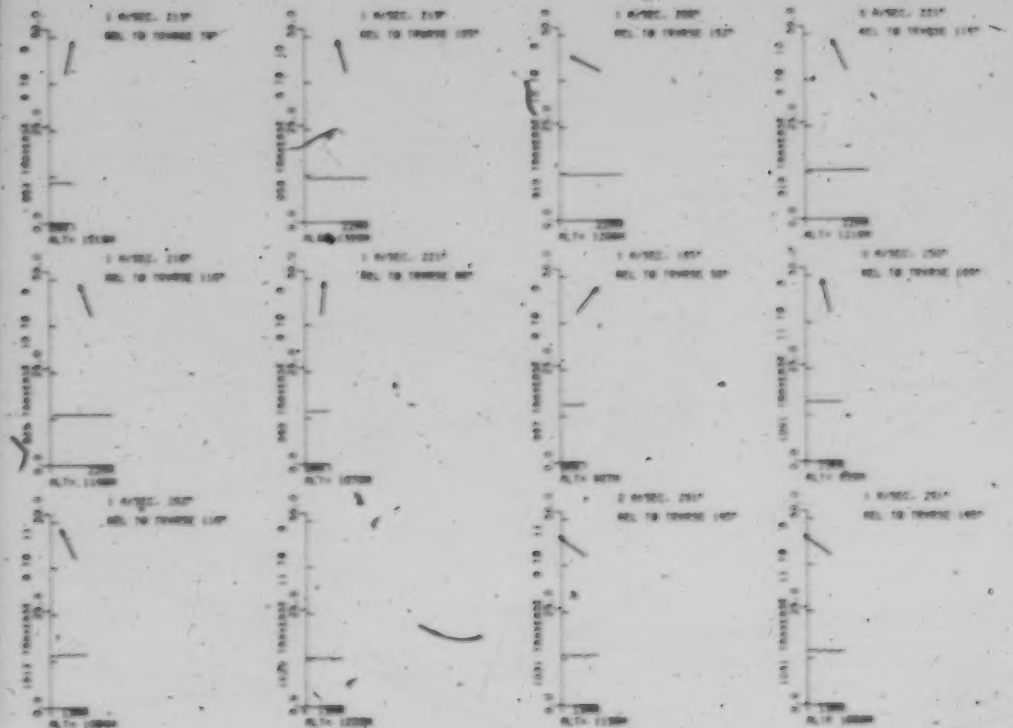
PART I

METEOROLOGY RESEARCH, INCORPORATED DATA

6027176

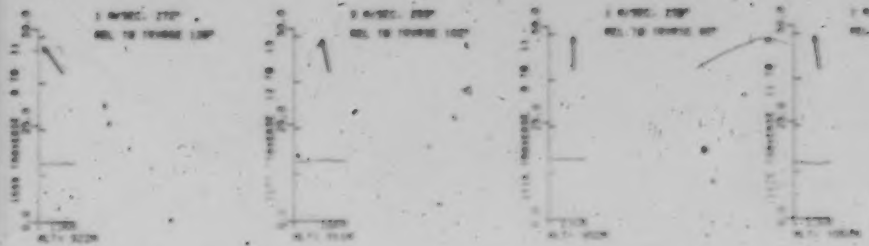
MAP 1





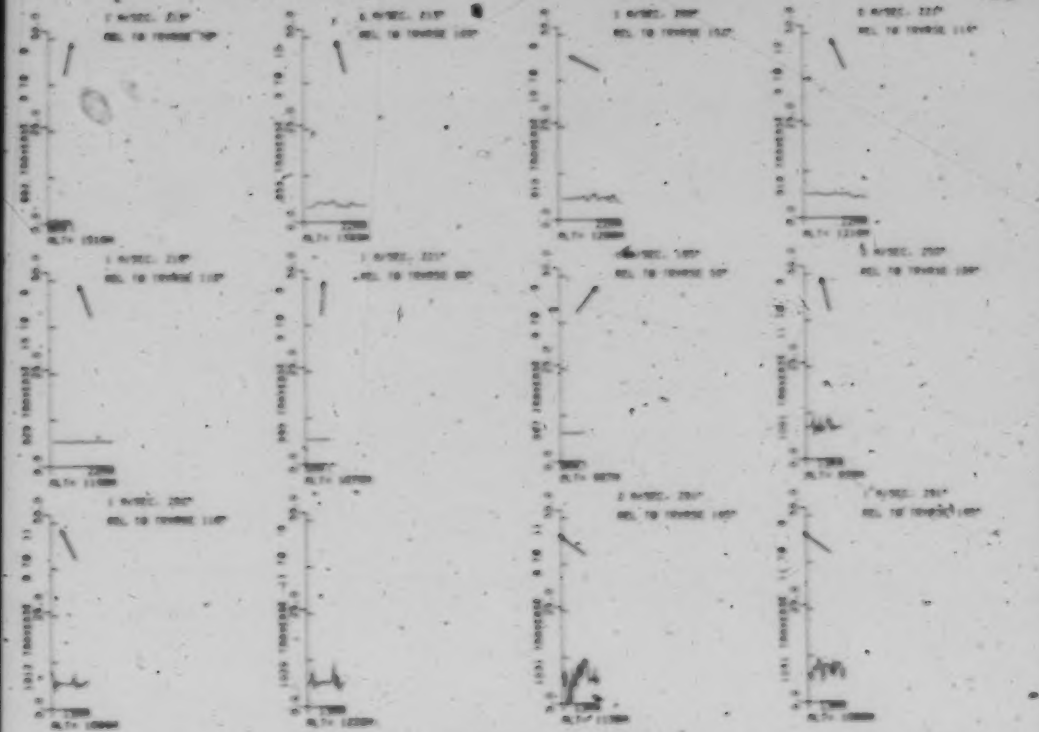
TEMP IN DEGREES C

MAP 1



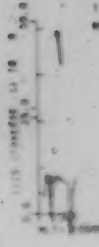
TEMP IN DEGREES C

MAP 1

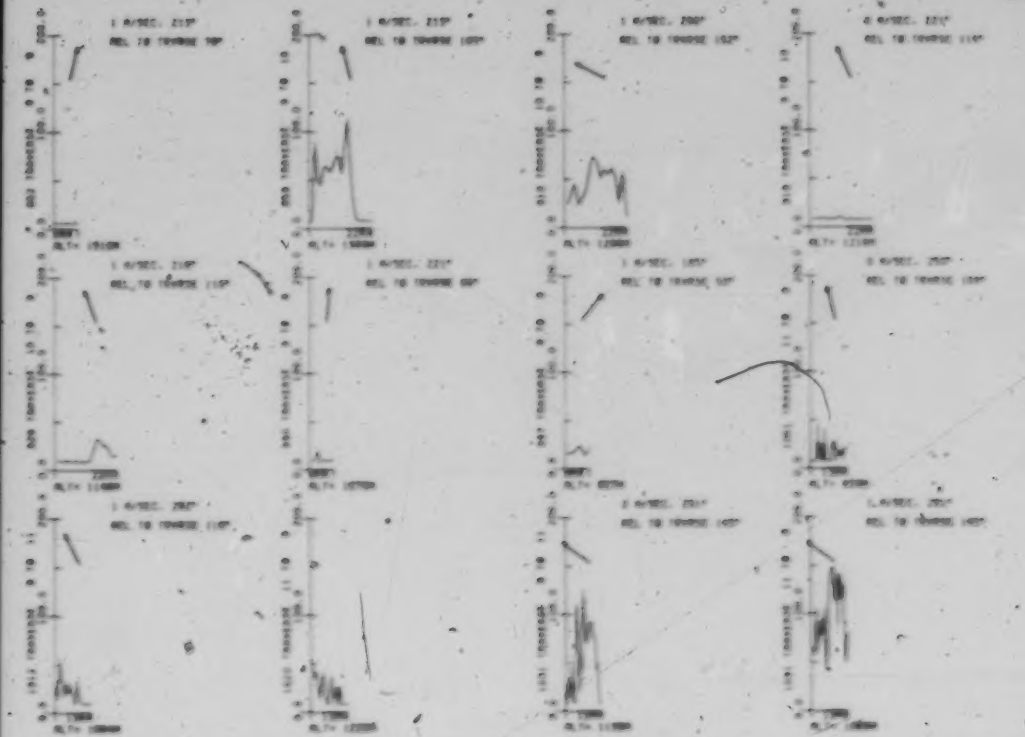


DEWPOINT IN DEGREES C

MAP 1

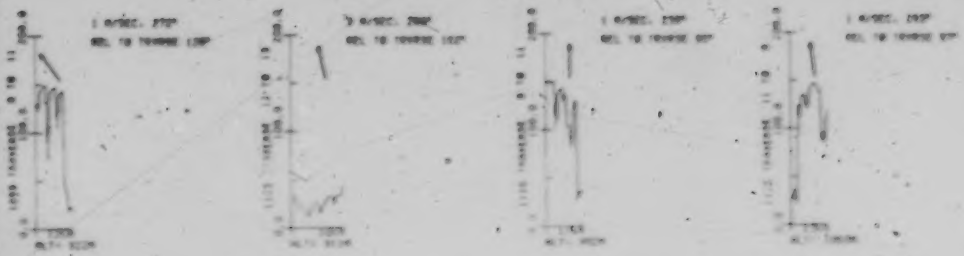


DEWPOINT IN DEGREES C



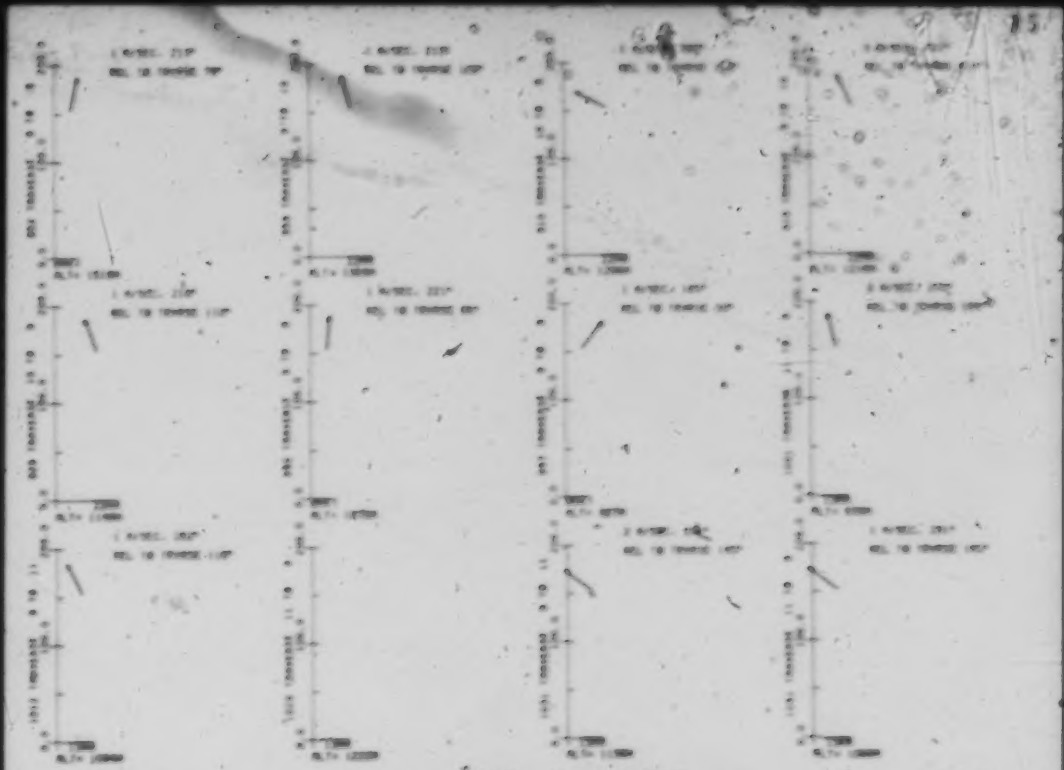
CNC IN $10^3 CM^{-3}$

MAP 1



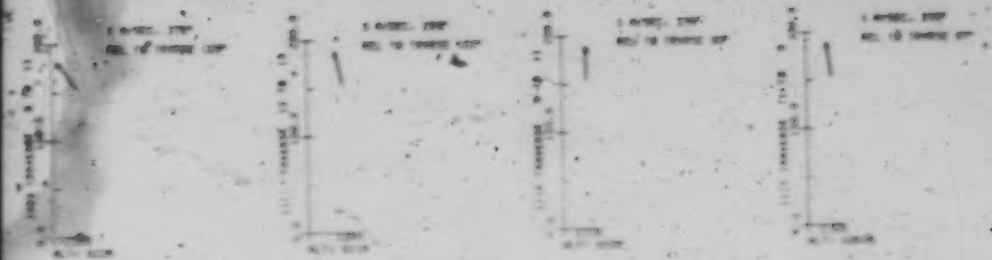
CNC IN $10^{6}CM^{-2}$

MAP I



CHARGE IN MILLIVOLTS

MAP 1



CHARGE IN MILLIMOLES

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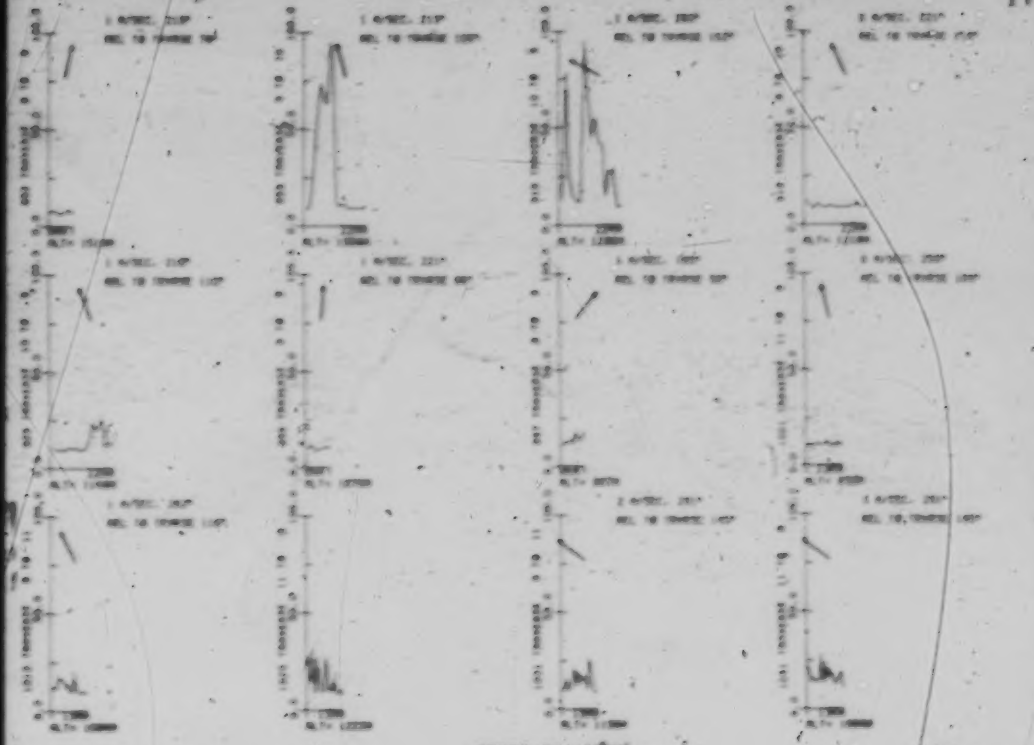
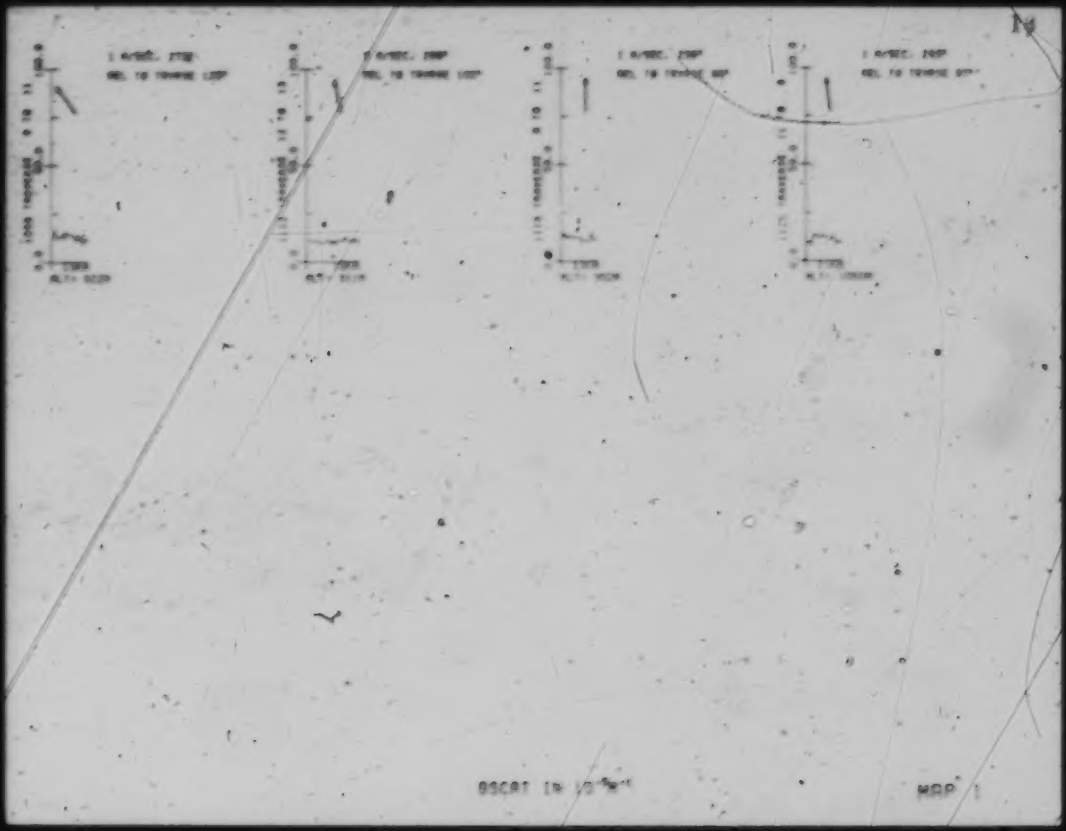
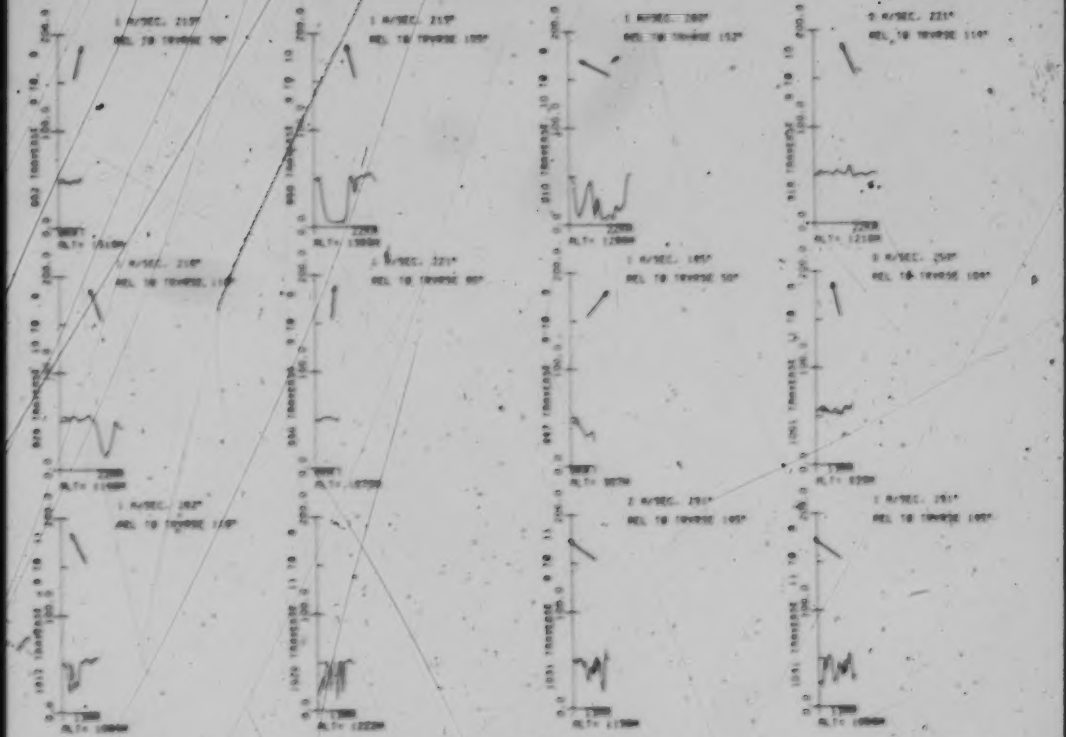


BSCAT $19 \cdot 10^{-4} m^{-1}$

MAP 1





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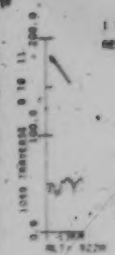

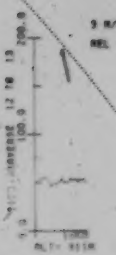

83 IN P.P.B.

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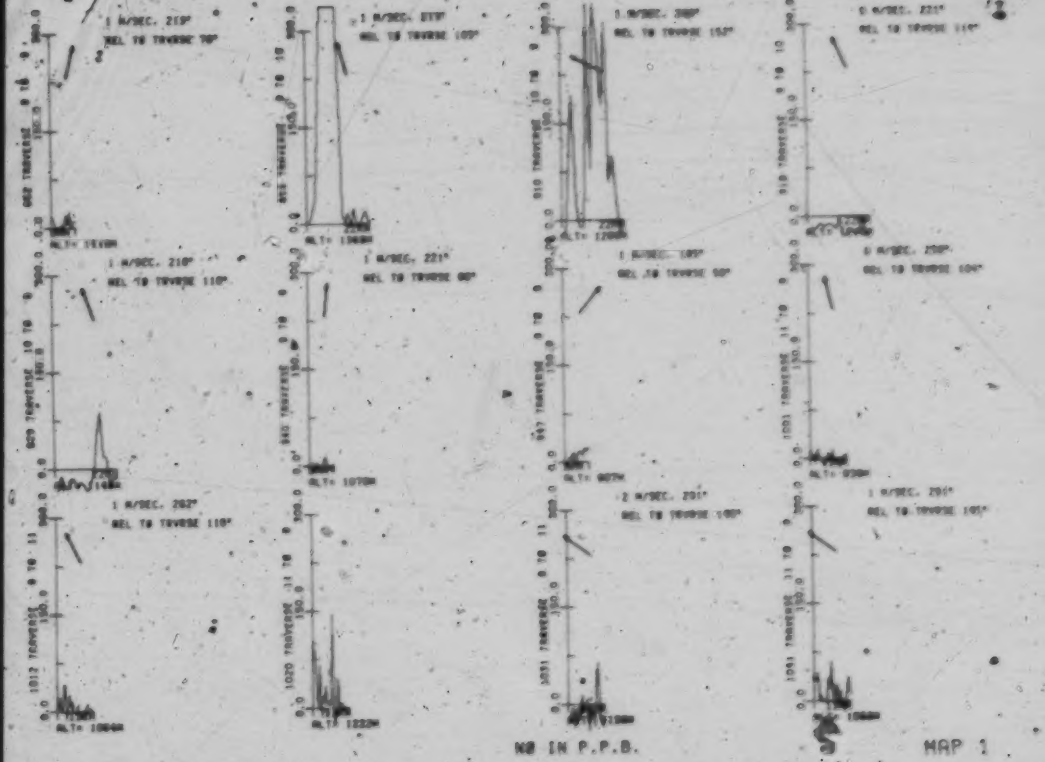

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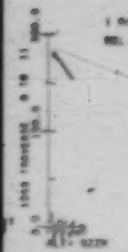

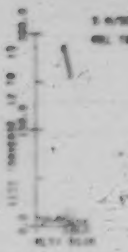

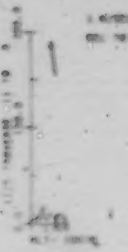

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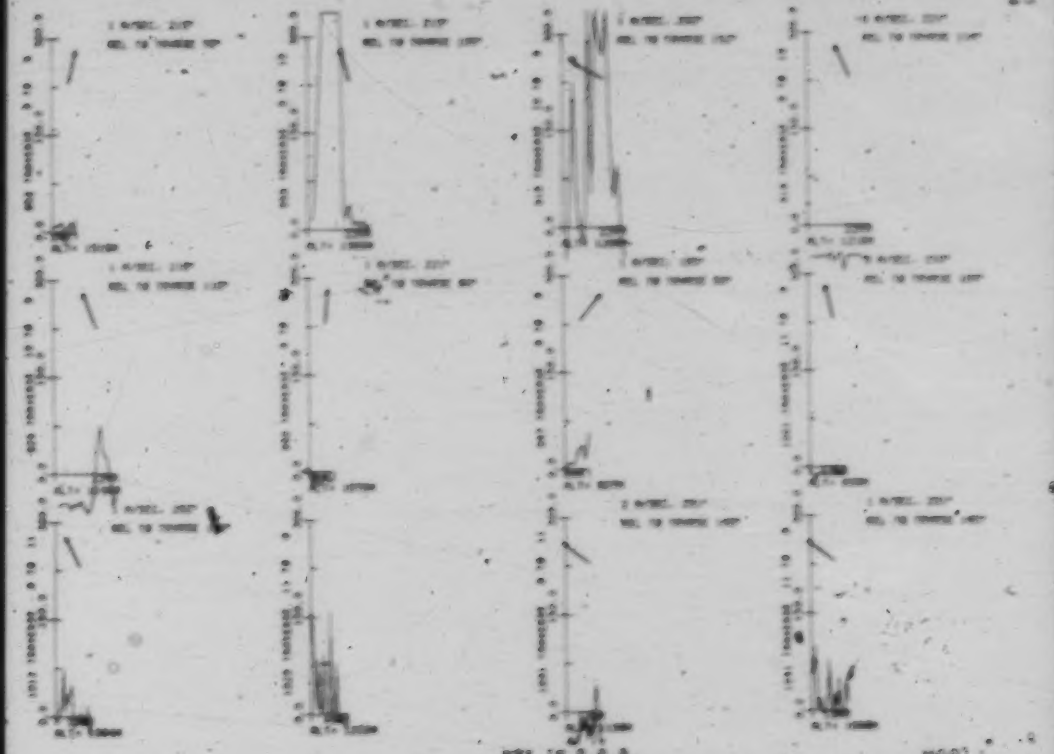

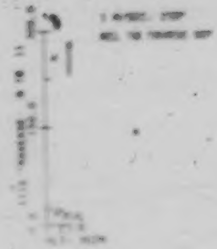

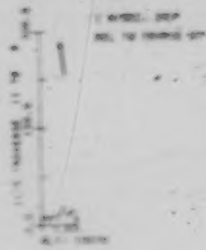

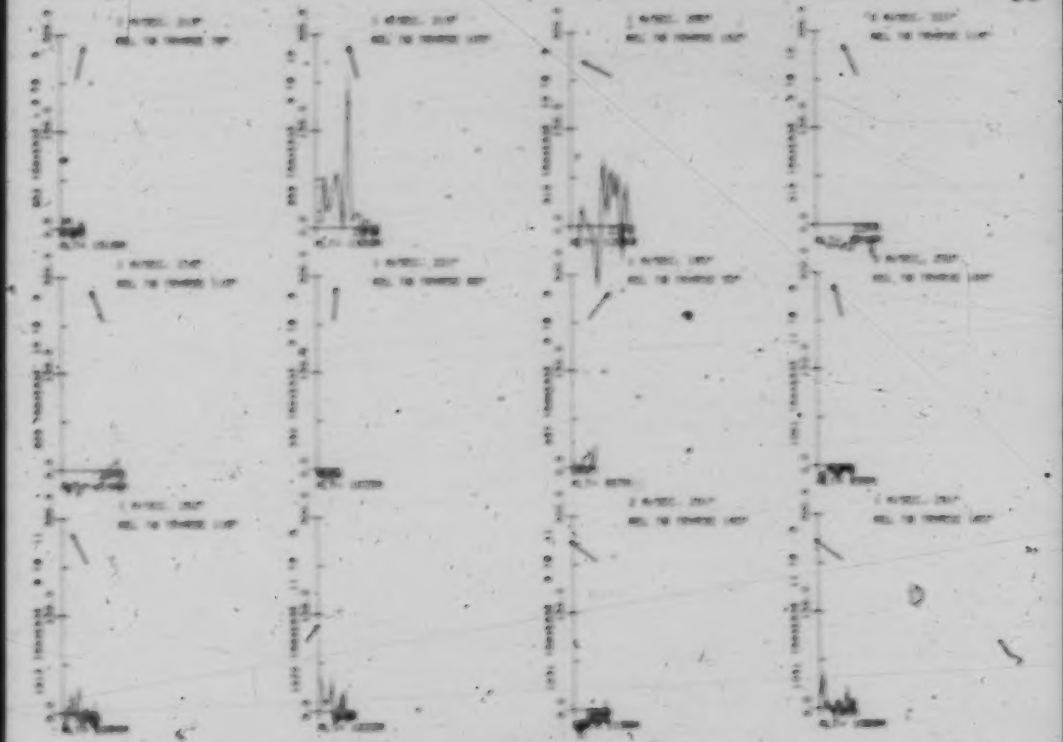

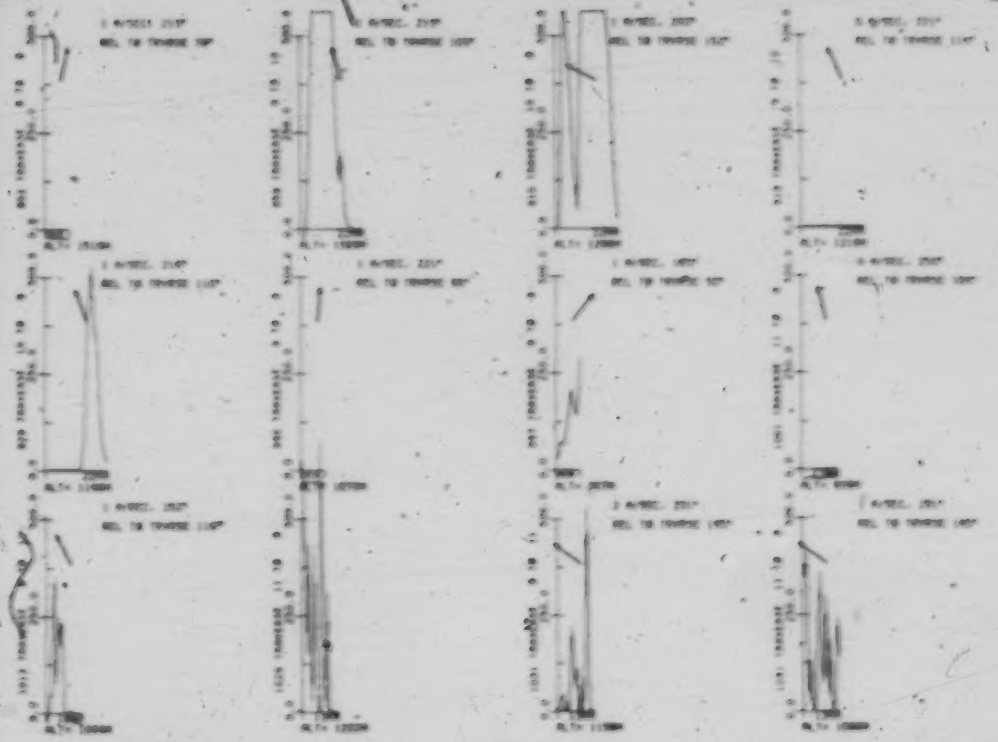

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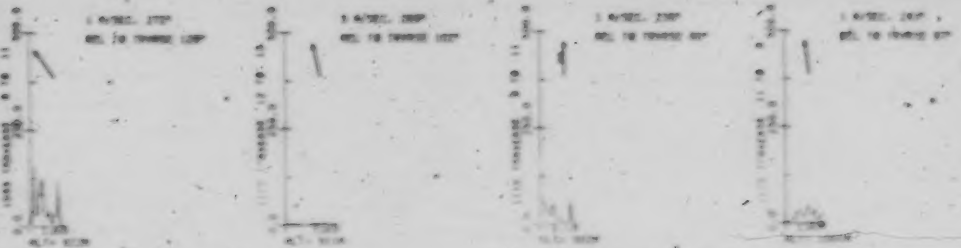

602717G

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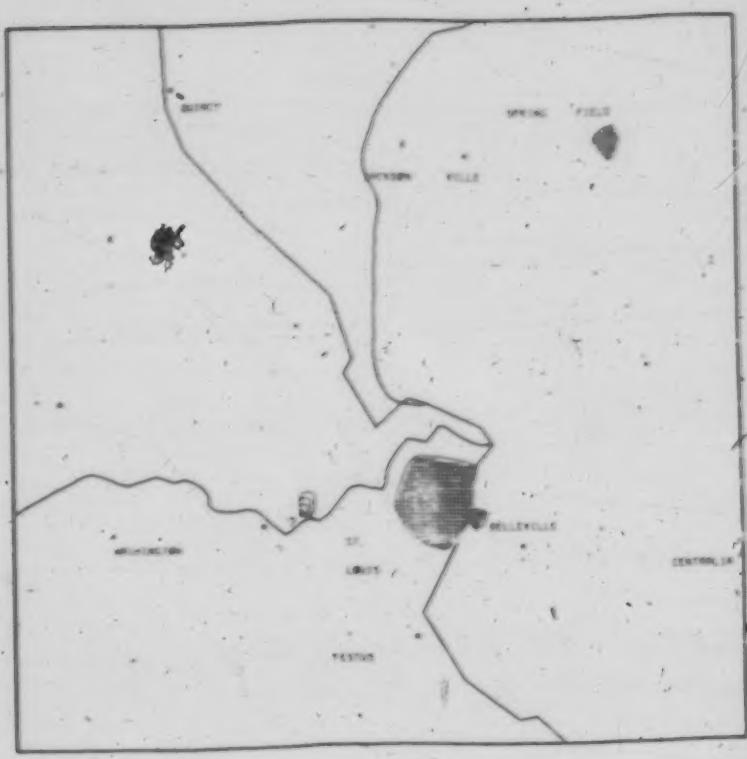
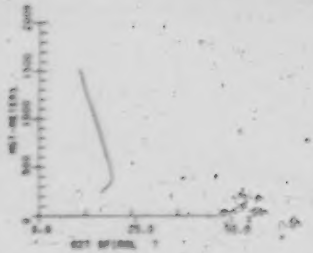
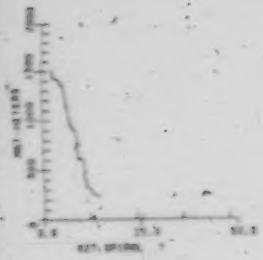




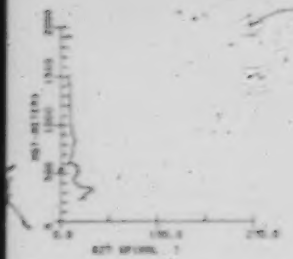
TEMP IN DEGREES C

MAP 1



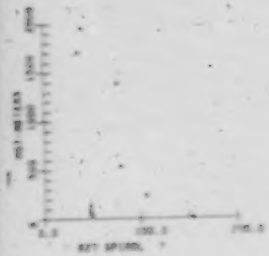
DEWPOINT IN DEGREES C

MAP 1



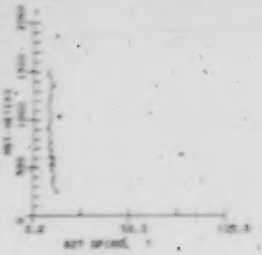
CNC IN $10^5 cm^{-3}$

MAP 1



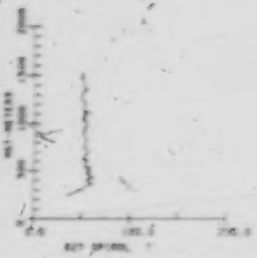
CHARGE IN MILLIVOLTS

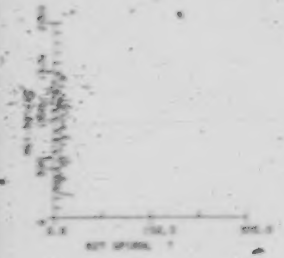
MAP 1

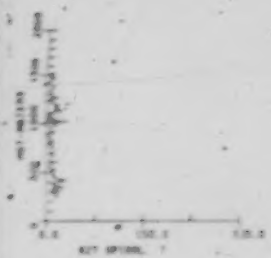


BSCAT IN 10^{-3} M^{-1}

MAP 1







38
NO2 IN P.P.B.
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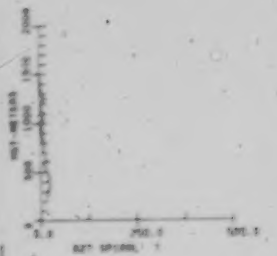

SO2 IN P.P.B.

MAP 1

6037276

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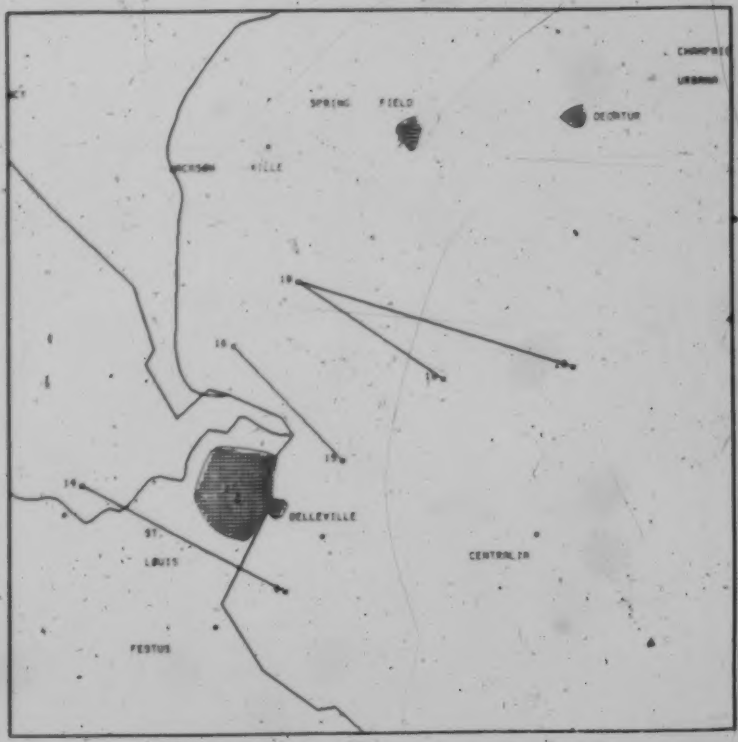
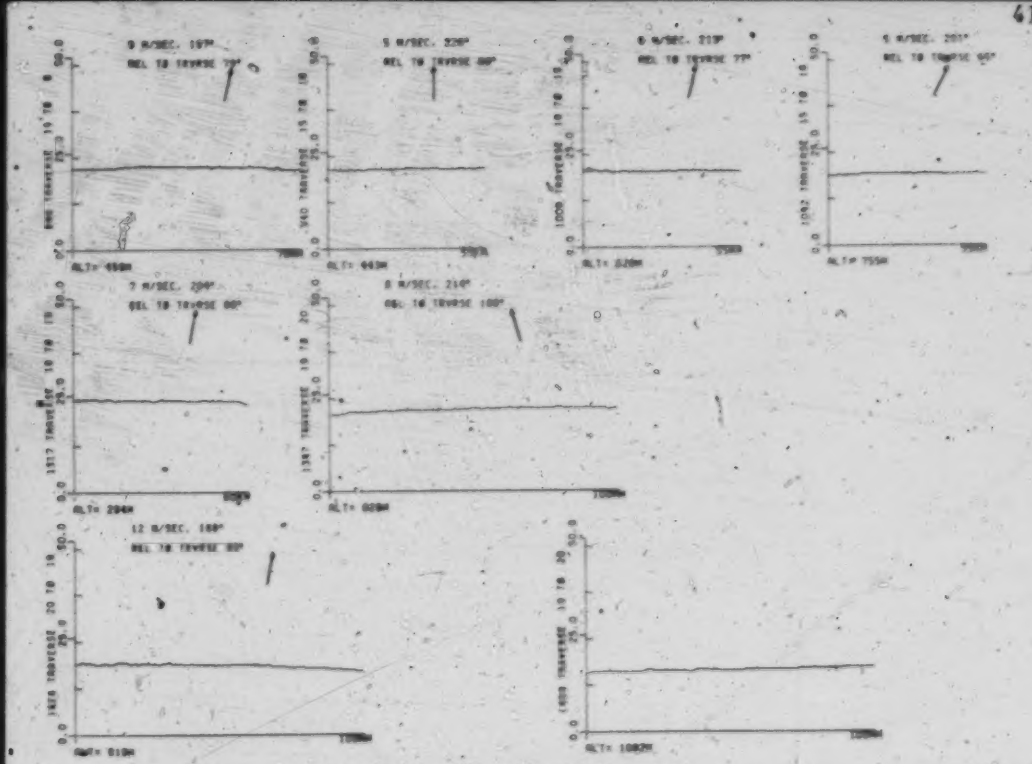
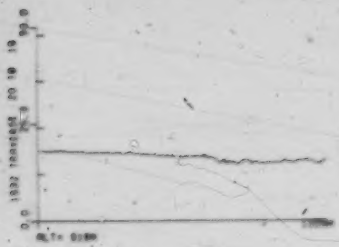
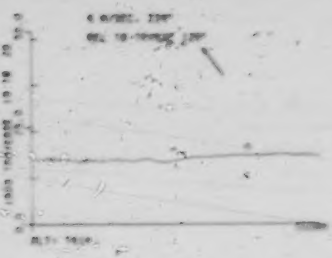



TEMP IN DEGREES C
MAP 2

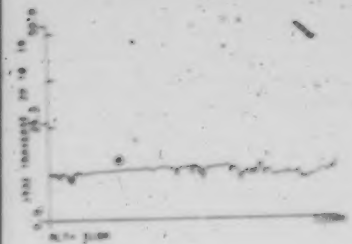




TEMP IN DEGREES C

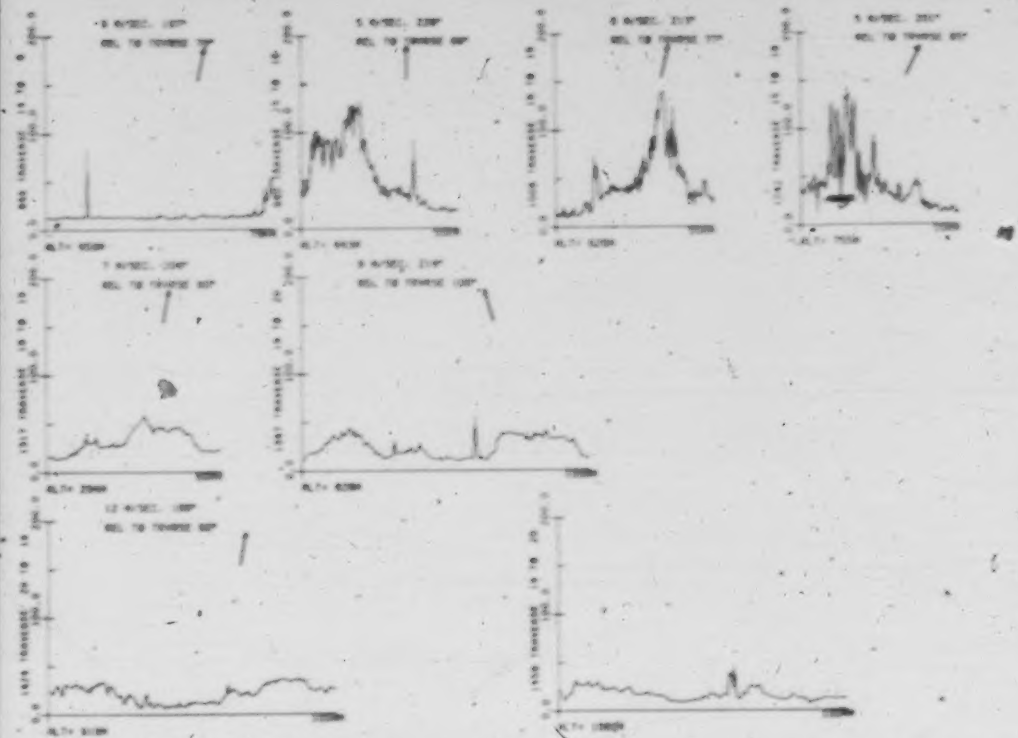
DEWPOINT IN DEGREES C

MAP 2



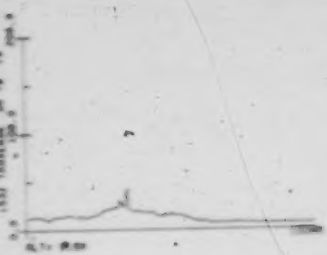
DEWPOINT IN DEGREES C

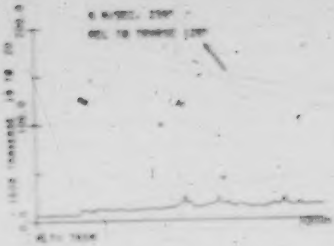
MDP



CNC IN $10^3 CM^{-3}$

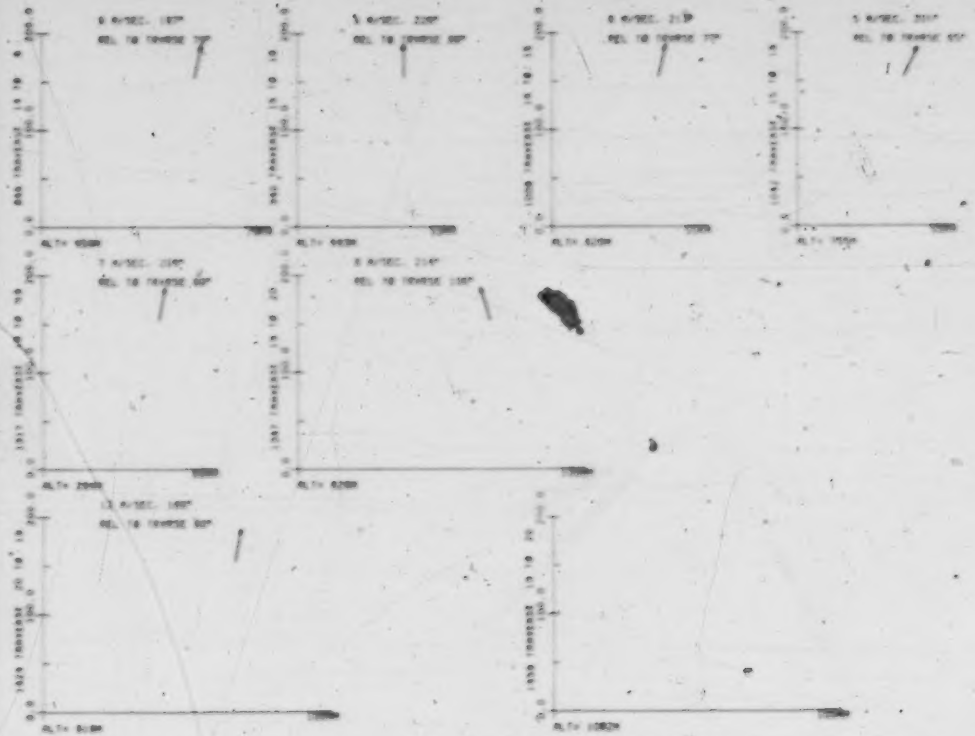
MAP 2





CNC in $10^6 cm^{-3}$

MOP

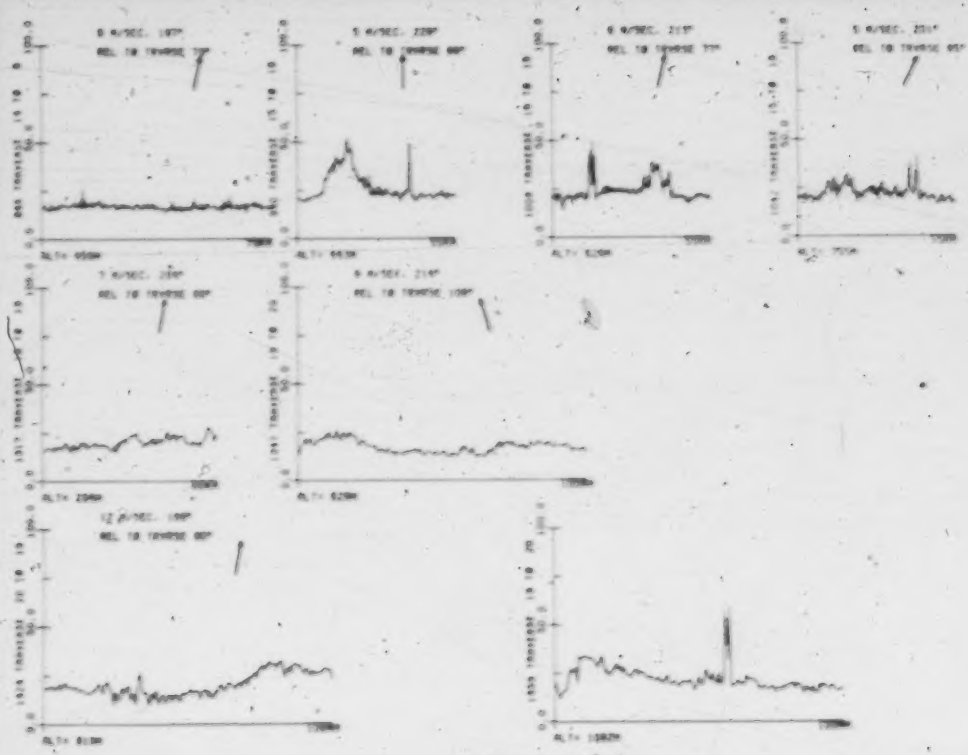


CHARGE IN MILLIVOLTS

MAP 2

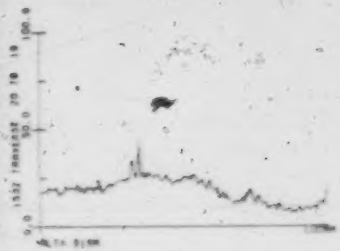
CHARGE IN MILLIVOLTS

MAP 2



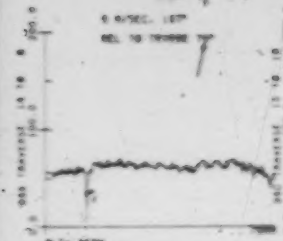
BSCAT IN $10^{-5}m^{-1}$

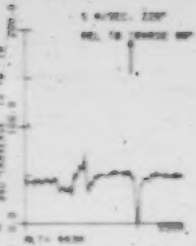
MAP 2

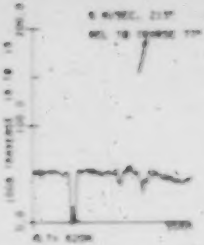


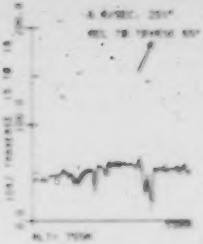
BSDAT IN $10^{-6}M^{-1}$

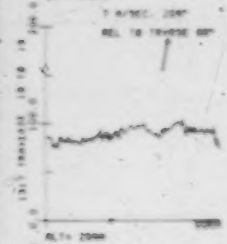
MAP

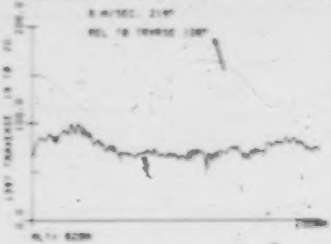


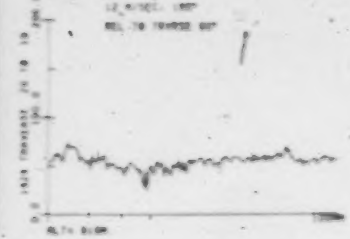


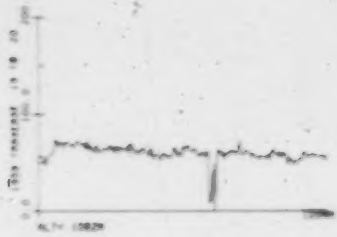






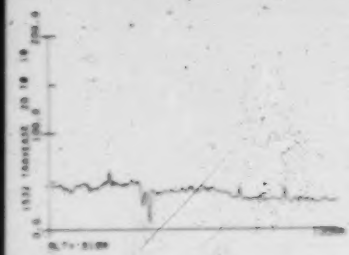


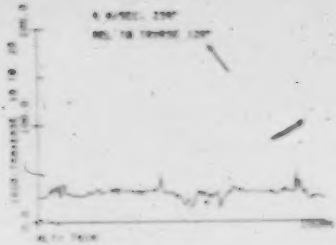




83 IN P.P.B.

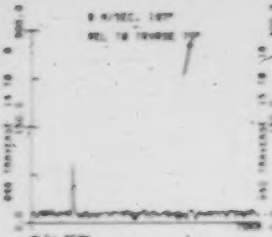
MAP 2

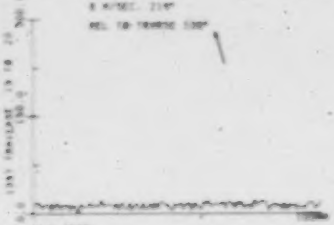


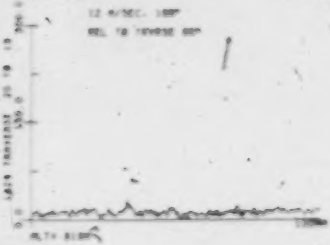


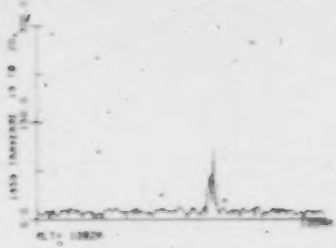
03 IN P.P.B.

MAP 2



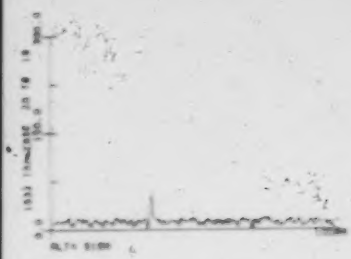


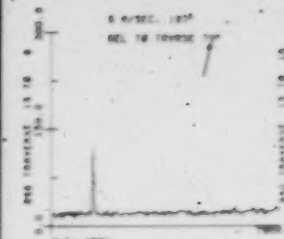


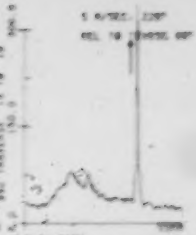


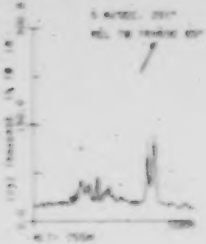
NB IN P.P.B.

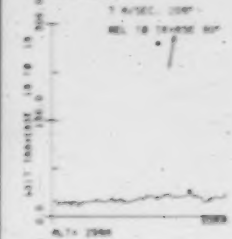
MAP 2

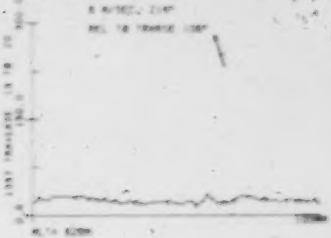


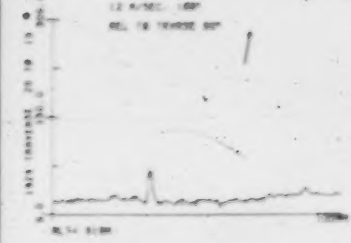






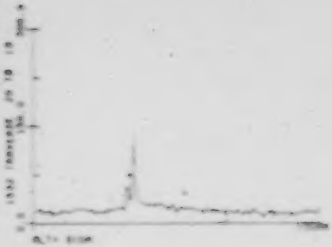


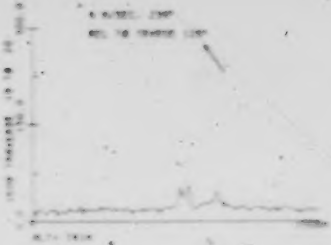




NOT IN P.P.S.

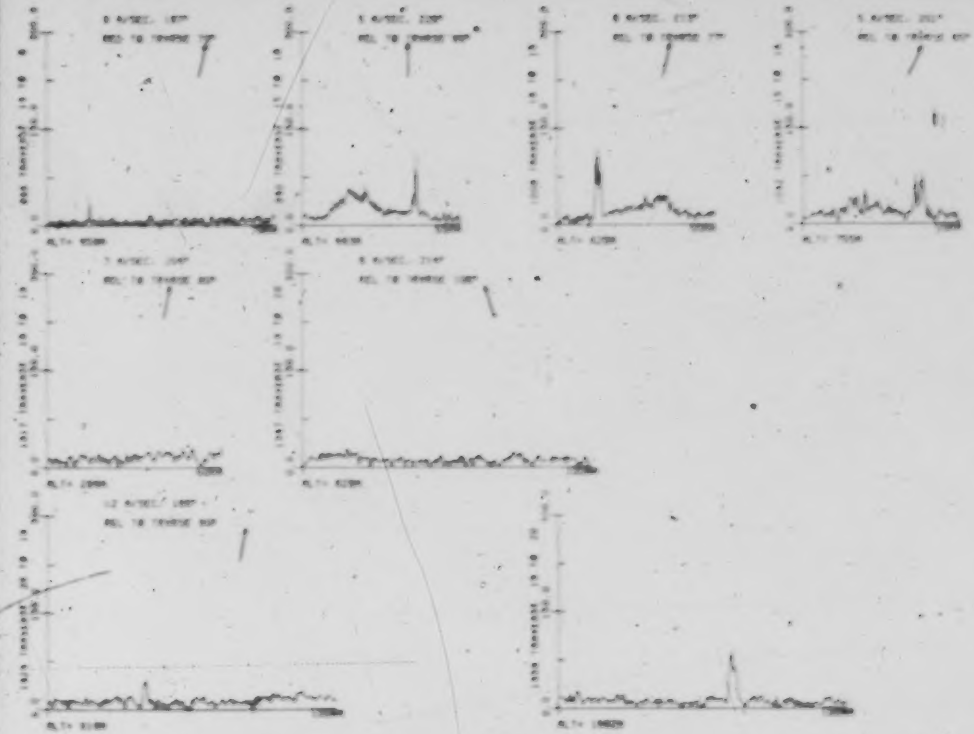
MAP





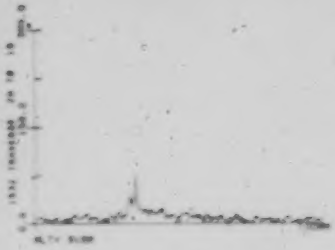
NOT IN P.P.B.

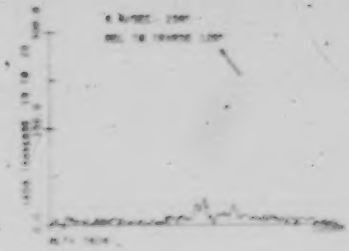
MAP 2

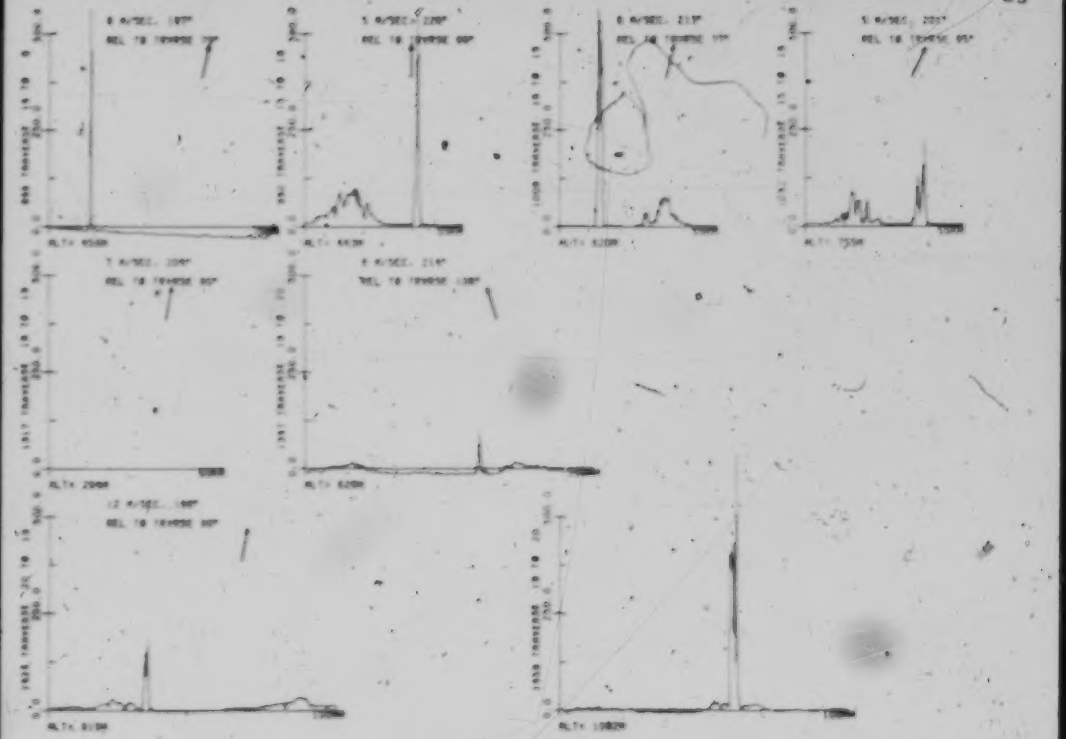


NO2 IN P.P.B.

MAP 2

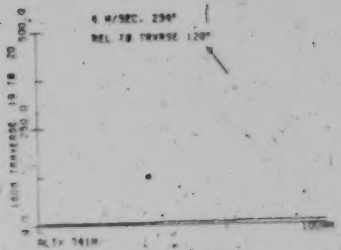






SBZ IN P.P.B.

MAP 2

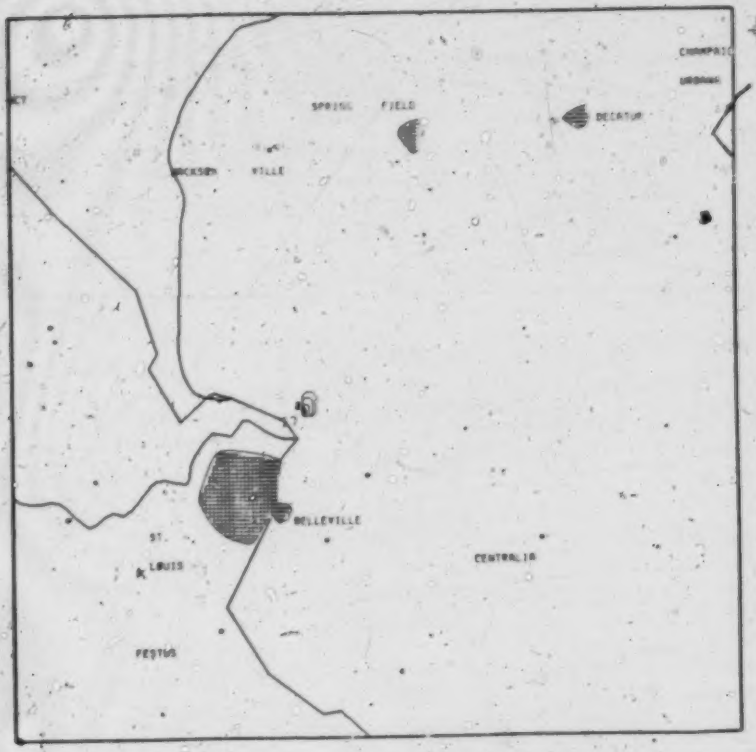


S02 IN P.P.B.

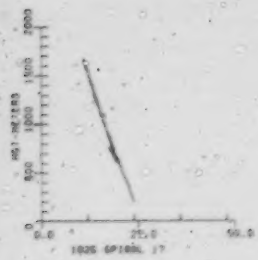
MAP

6037276

MAP 2

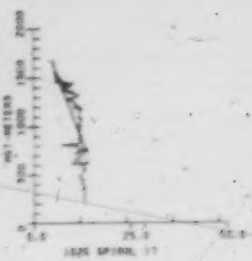


EAI

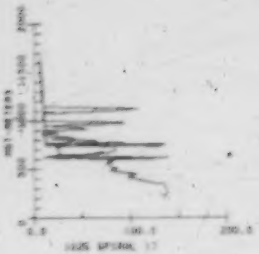


TEMP IN DEGREES C

MAP 2

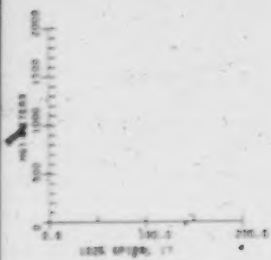


DEWPOINT IN DEGREES C



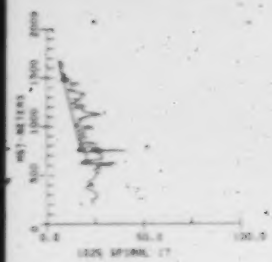
CNC IN $10^3 cm^{-3}$

MAP 2



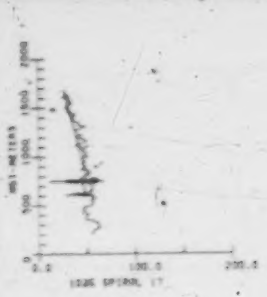
CHARGE IN MILLIVOLTS

MAP-2



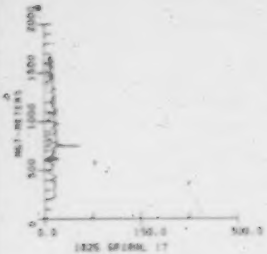
BSCAT IN 10

MAP 2



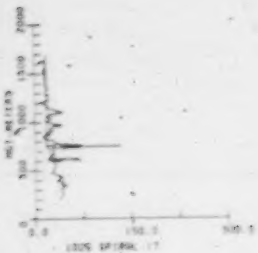
83 IN P.P.B.

MAP



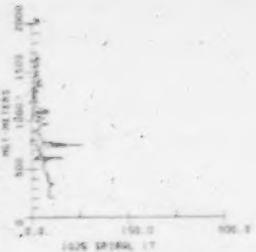
NB IN P.P.B.

MRP 2



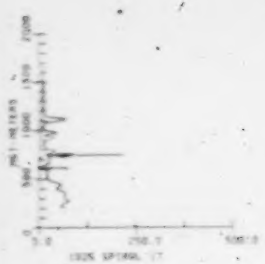
NOT IN P.P.B.

MAP 2



N82 IN P.P.B.

MAP

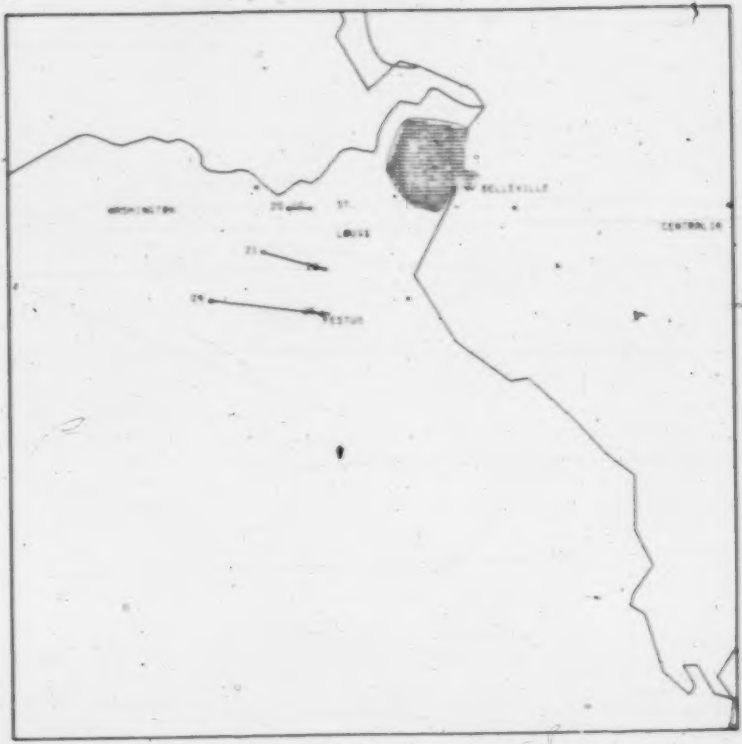


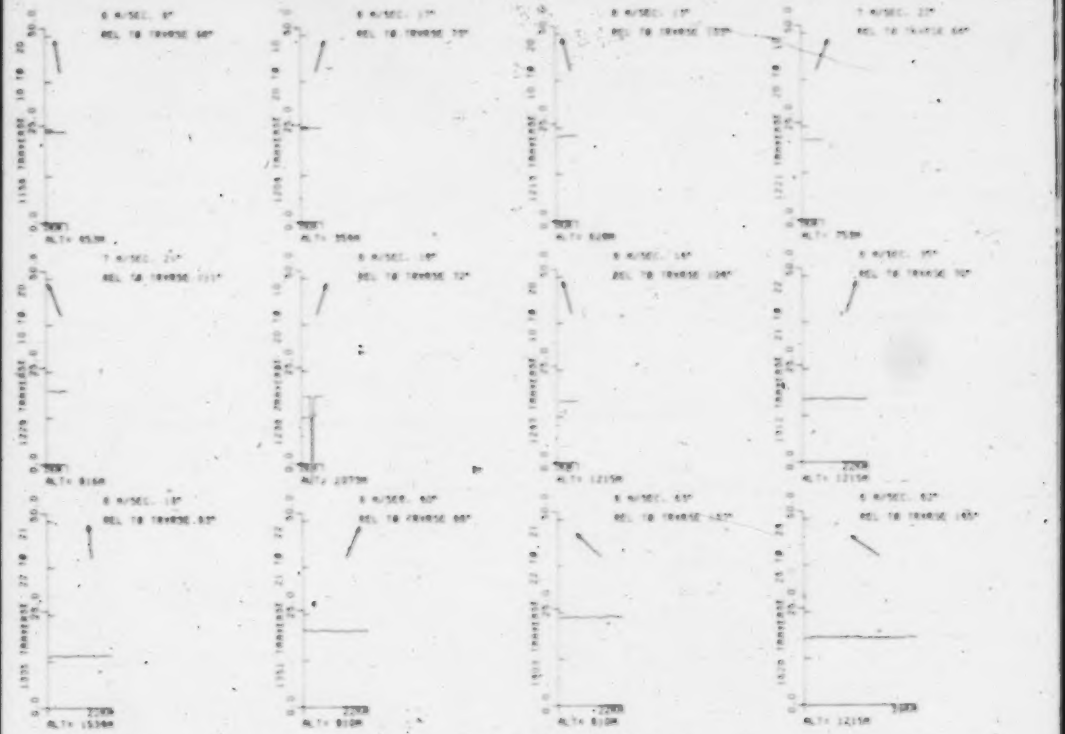
SO2 IN P.P.B.

MOP

6057576

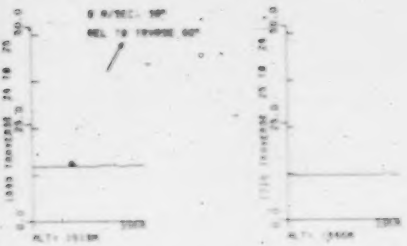
MAP 3





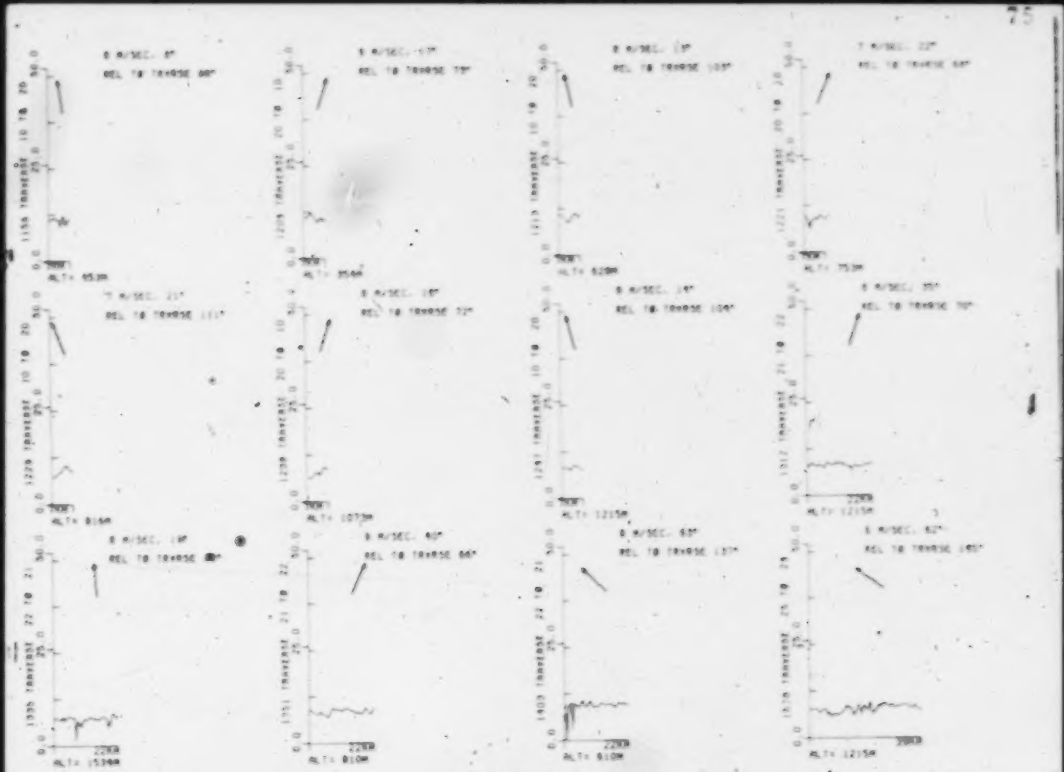
TEMP IN DEGREES C

MAP 3



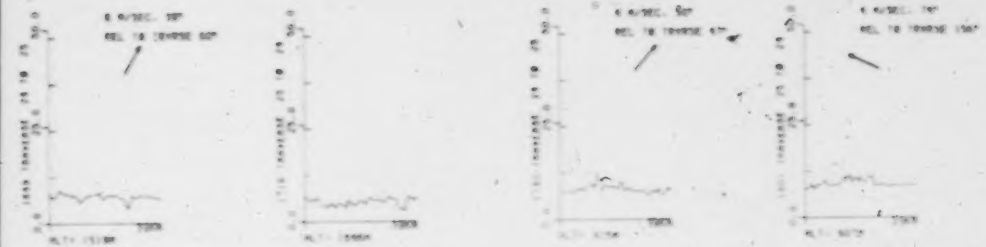
TEMP IN DEGREES C

MAP

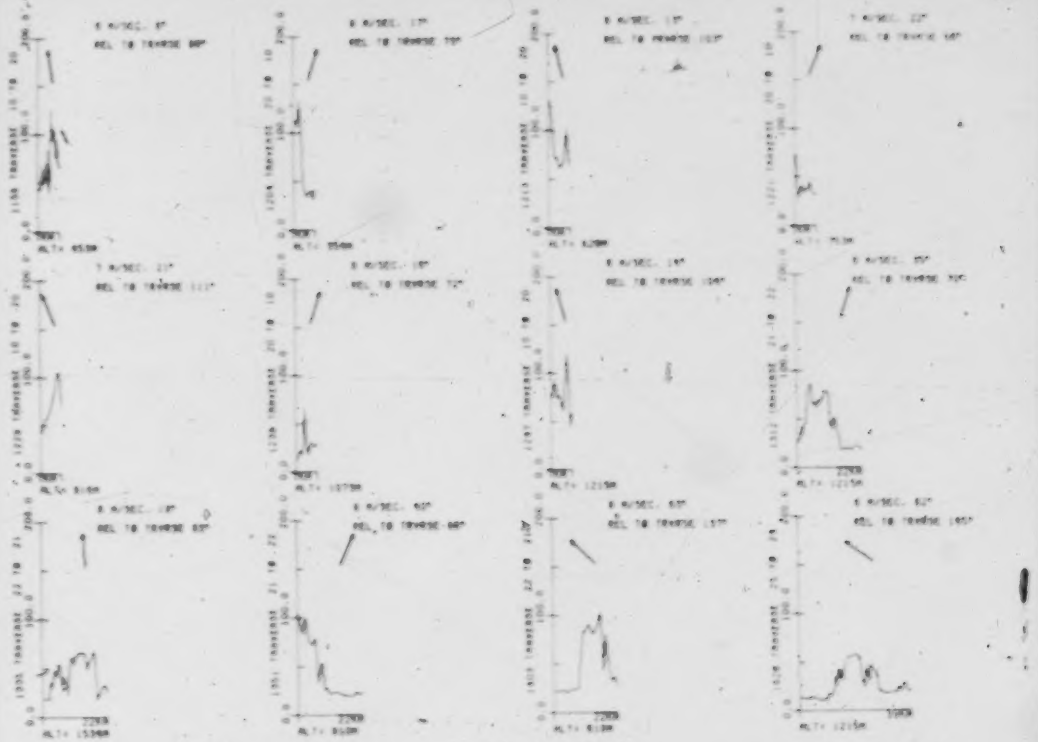


DEWPOINT IN DEGREES C

MAP 3

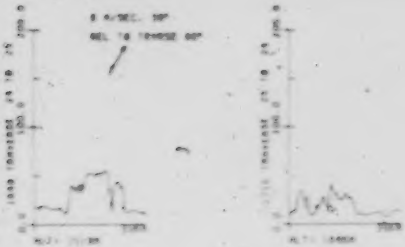


DEWPOINT IN DEGREES C



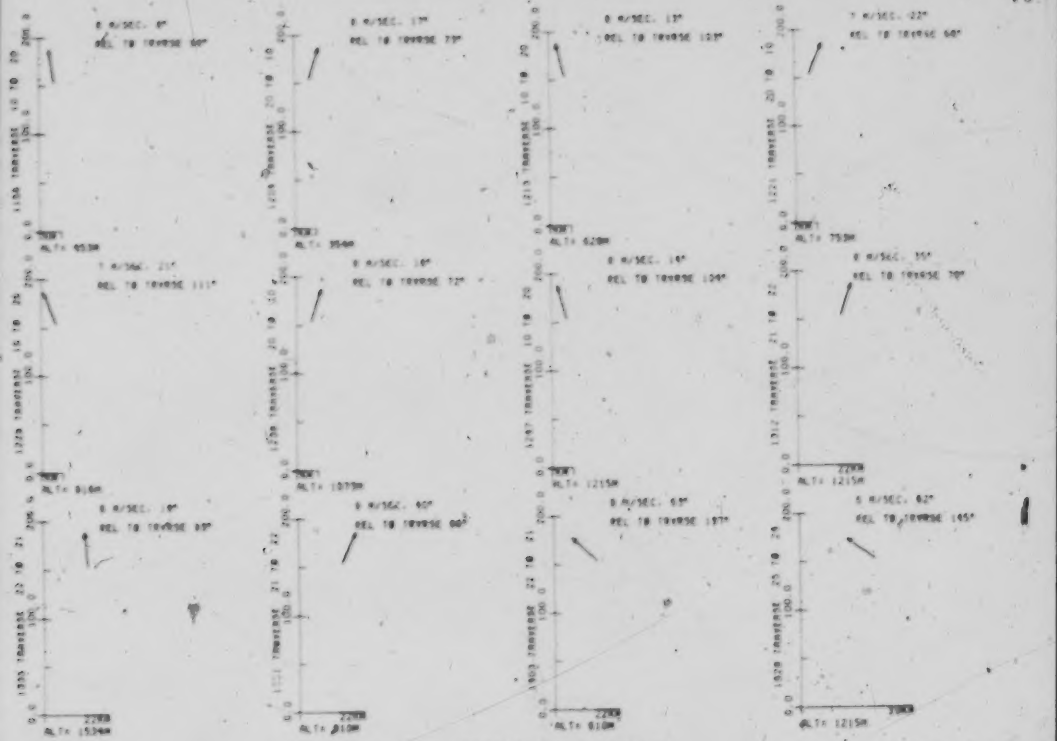
CNC IN $\cdot 10^3 CM^{-3}$

MAP



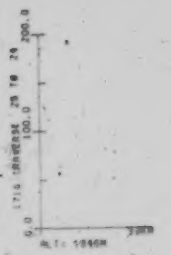
CNC IN $10^5 cm^{-3}$

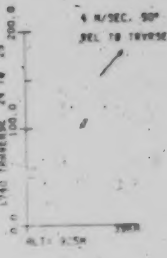
MAP 3



CHARGE IN MICLIVOLTS

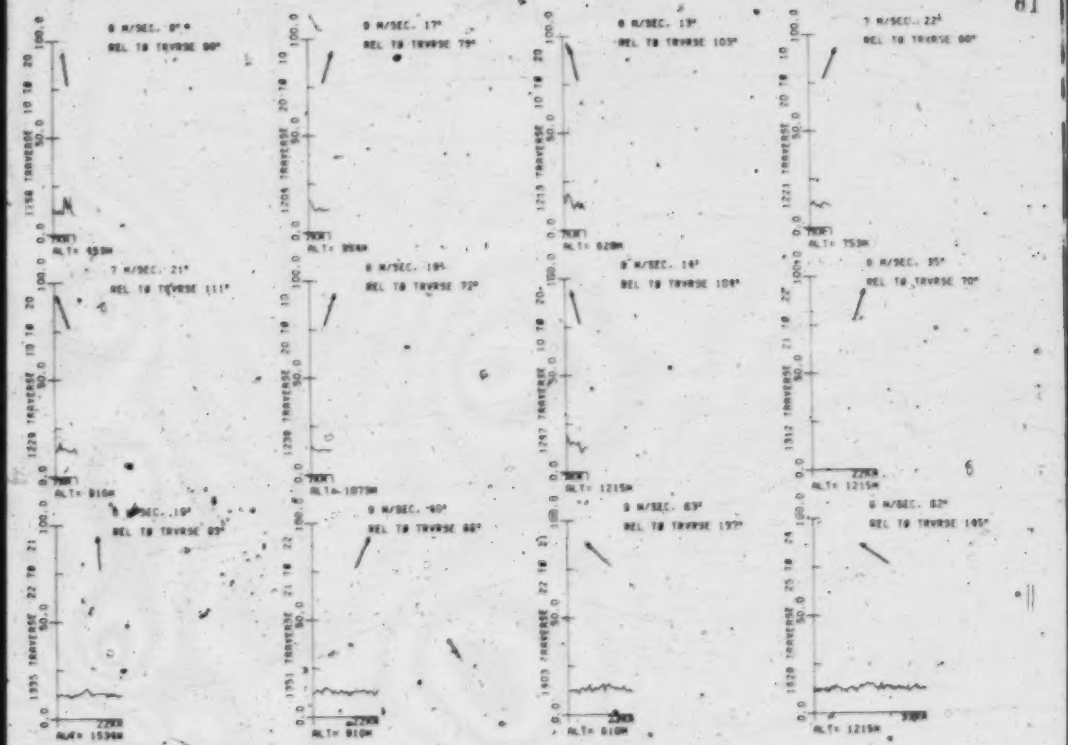
MAP 3

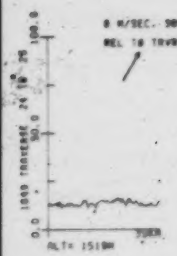


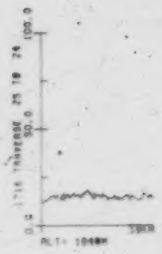


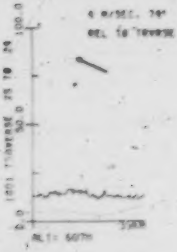
CHARGE IN MILLIVOLTS

MAP 13


0 M/SEC. 0°
REL TO TRVRSE 90°
0 M/SEC. 17°
REL TO TRVRSE 79°
0 M/SEC. 13°
REL TO TRVRSE 103°
7 M/SEC. 22°
REL TO TRVRSE 90°
7 M/SEC. 21°
REL TO TRVRSE 111°
0 M/SEC. 18°
REL TO TRVRSE 72°
0 M/SEC. 16°
REL TO TRVRSE 108°
0 M/SEC. 35°
REL TO TRVRSE 70°
0 M/SEC. 19°
REL TO TRVRSE 83°
0 M/SEC. 40°
REL TO TRVRSE 86°
0 M/SEC. 63°
REL TO TRVRSE 157°
0 M/SEC. 82°
REL TO TRVRSE 105°
BSCAT IN $10^{-5}M^{-1}$
MAP 3

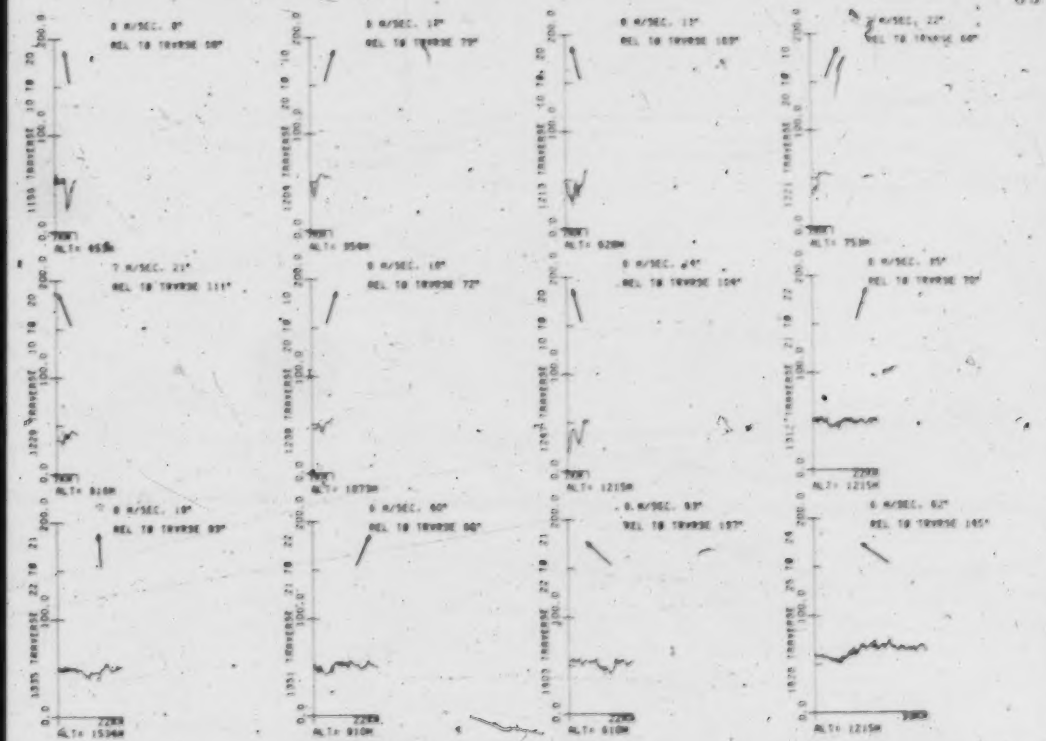






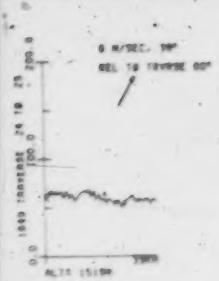
BSCAT IN $10^{-5}M^{-1}$

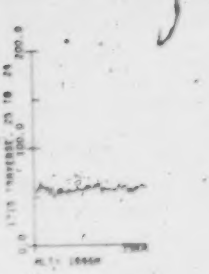
MAP

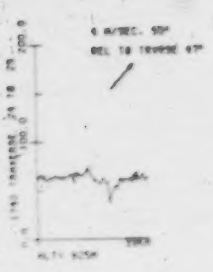


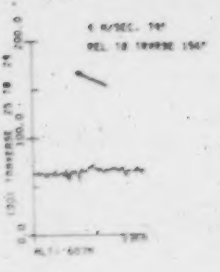
83 IN P.P.B.

MAP 3

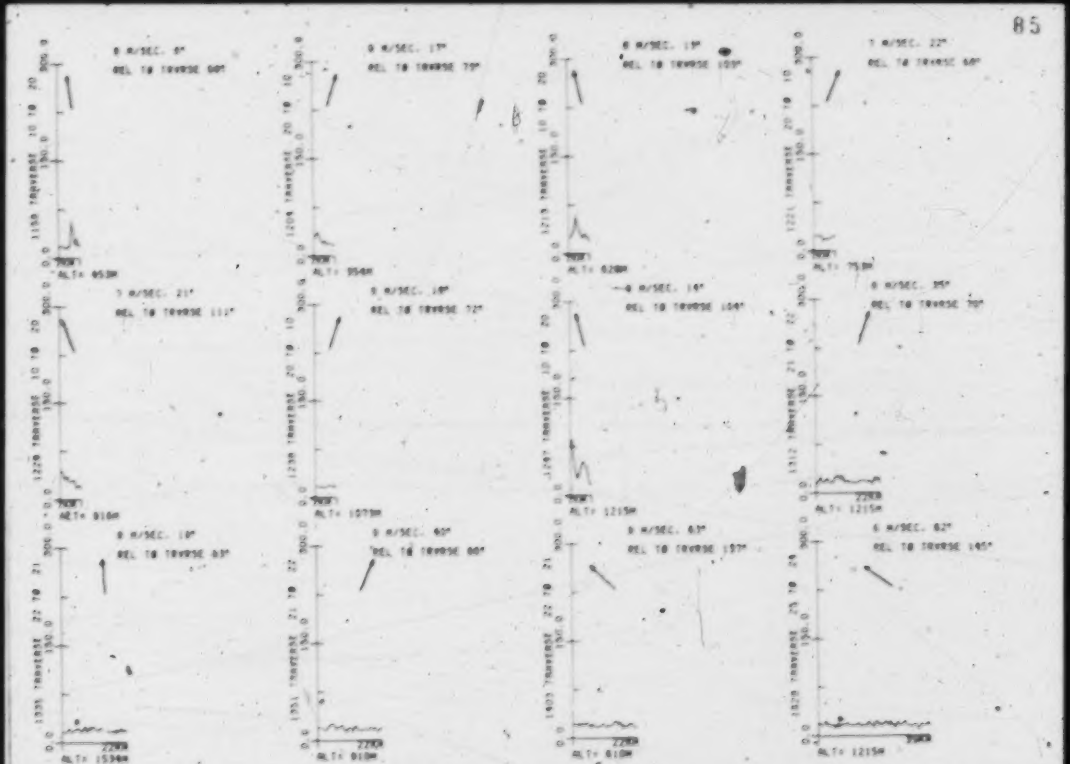






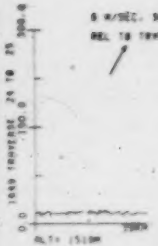


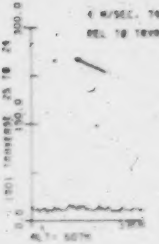
83 IN P.P.B.



NB IN P.P.B.

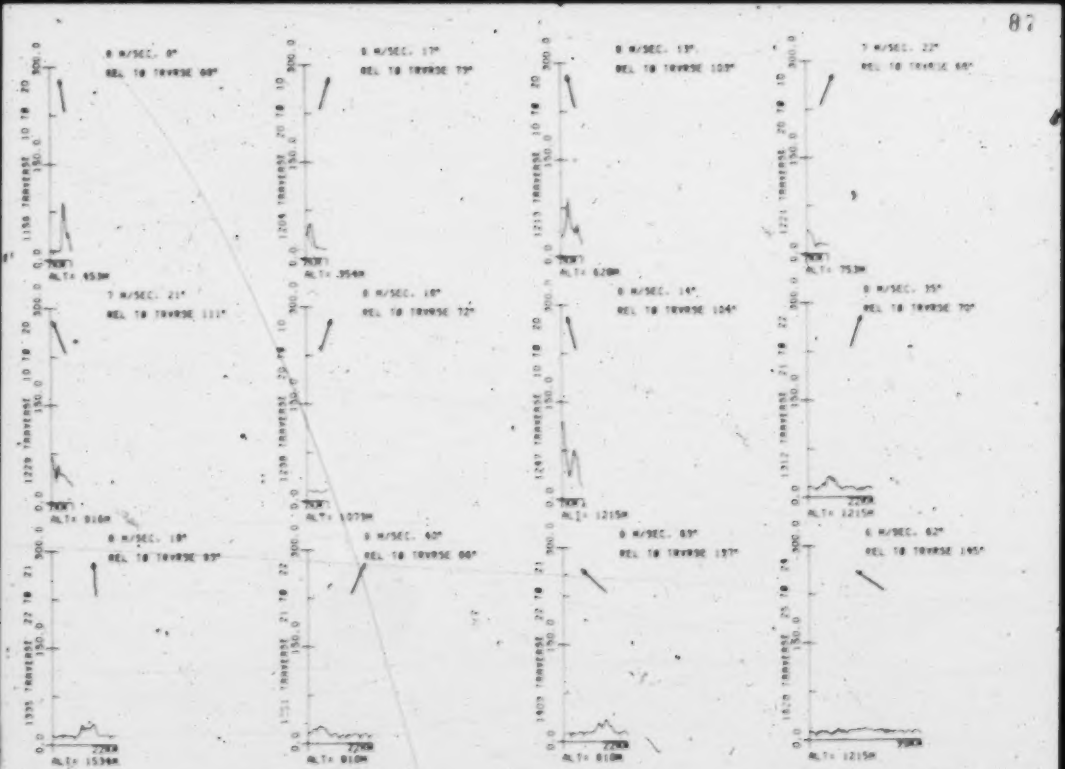
MAP 3





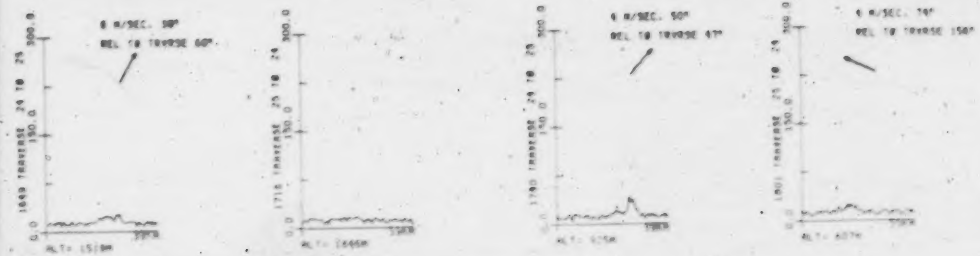
NO IN P.P.E.

MAP 3

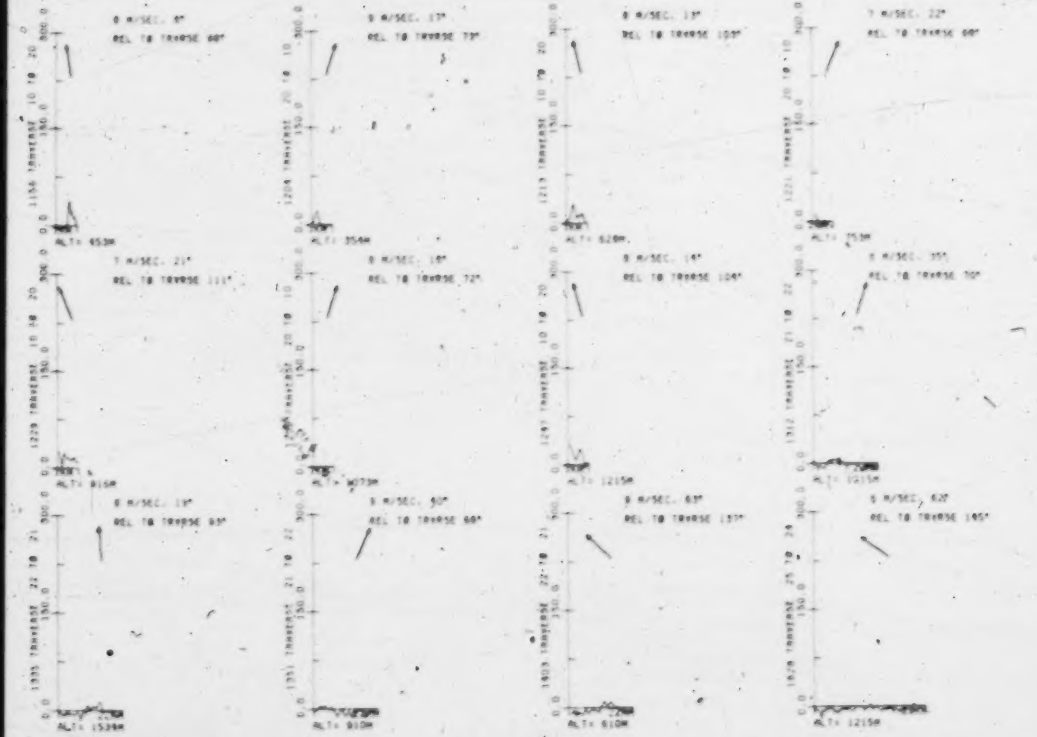


NOX IN P.P.B.

MAP 3

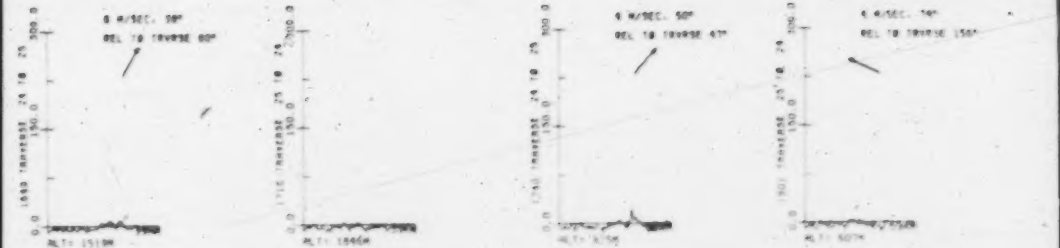

6 M/SEC. 90°
REL TO TRVRSE 60°
6 M/SEC. 90°
REL TO TRVRSE 47°
6 M/SEC. 90°
REL TO TRVRSE 150°

NOX IN P.P.B.



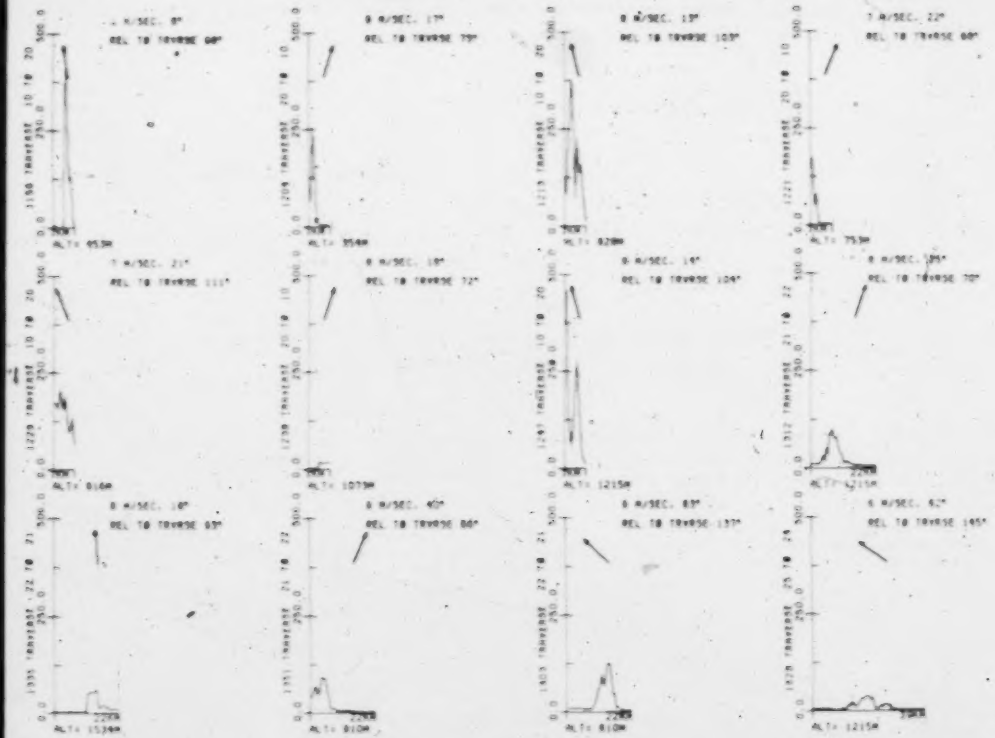
N82 IN P.P.B.

MAP 3



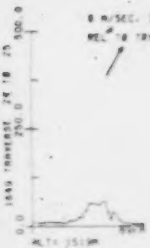
N02 IN P.P.B.

MAP 3



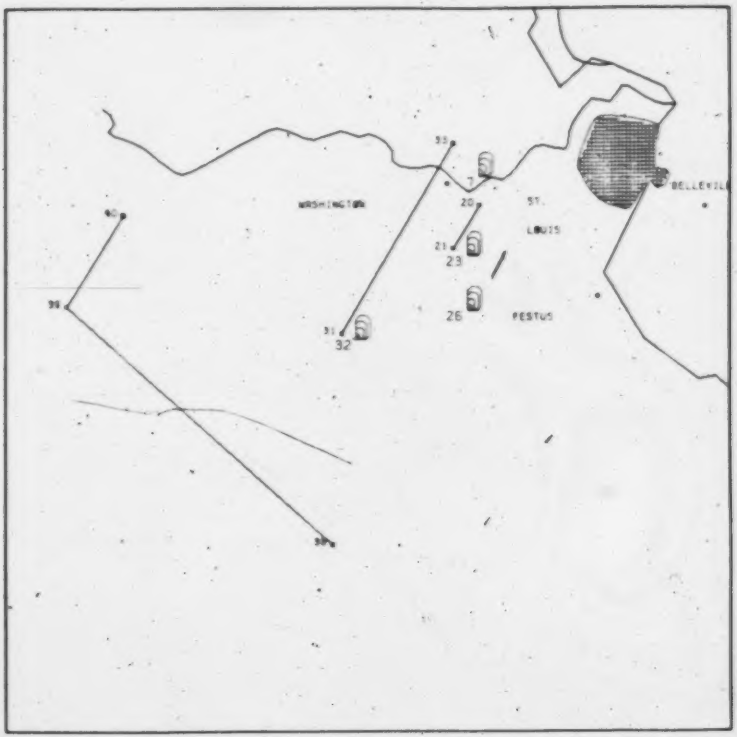
SO2 IN P.P.B.

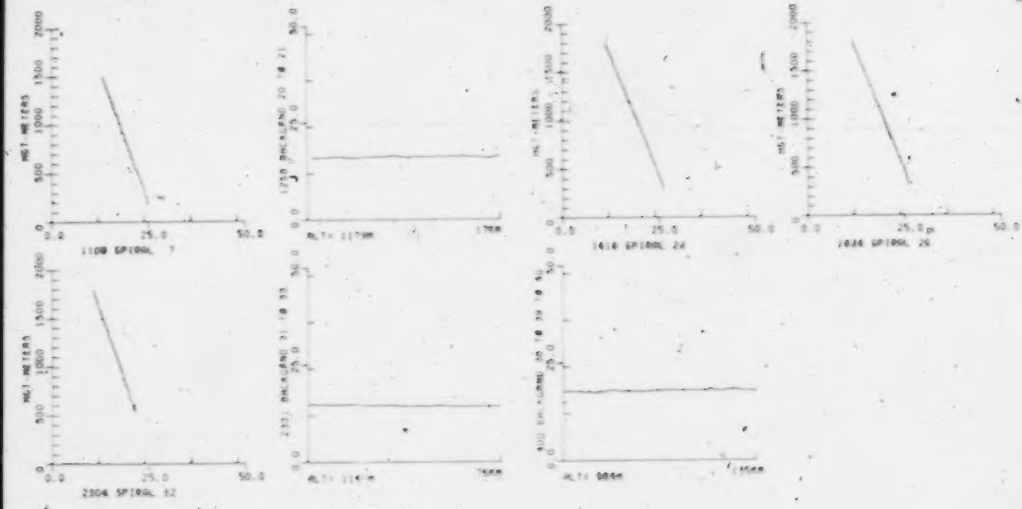
MAP 3



6057576

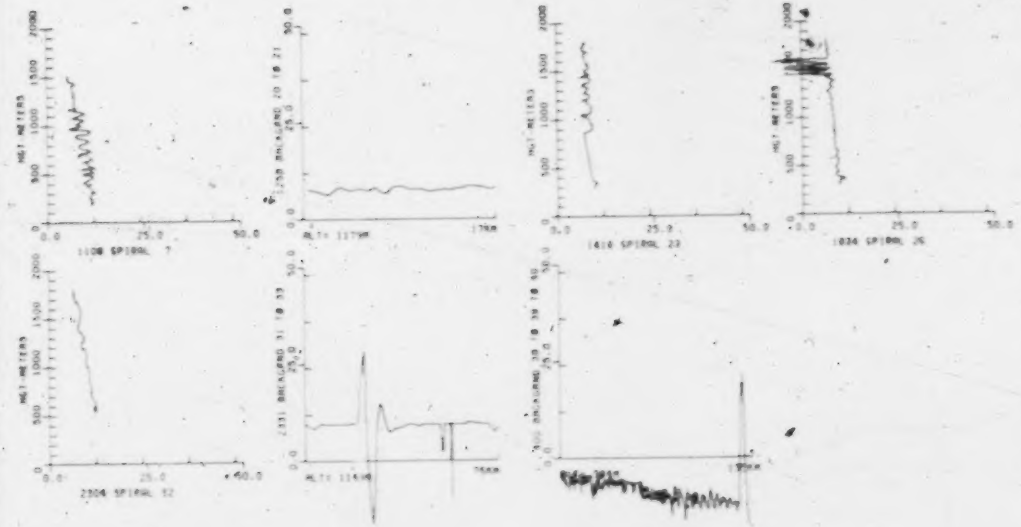
MAP 3





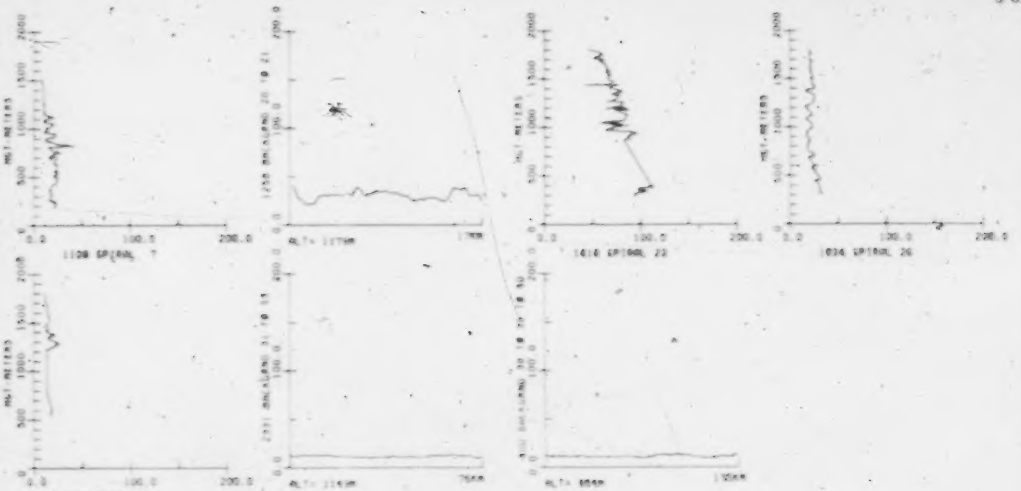
TEMP IN DEGREES C

MAP 3



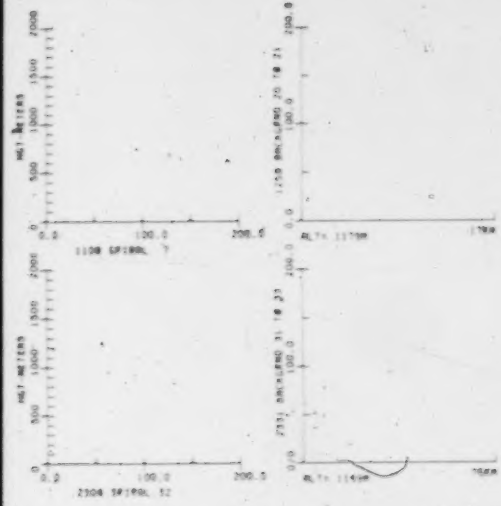
DEWPOINT IN DEGREES C

MAP 3



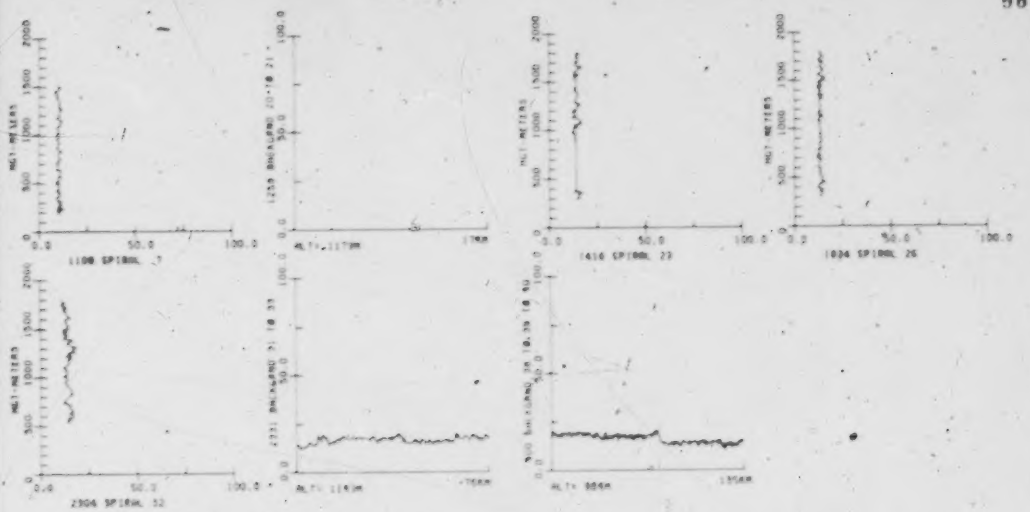
CNC IN $10^3 CM^{-3}$

MAP 3



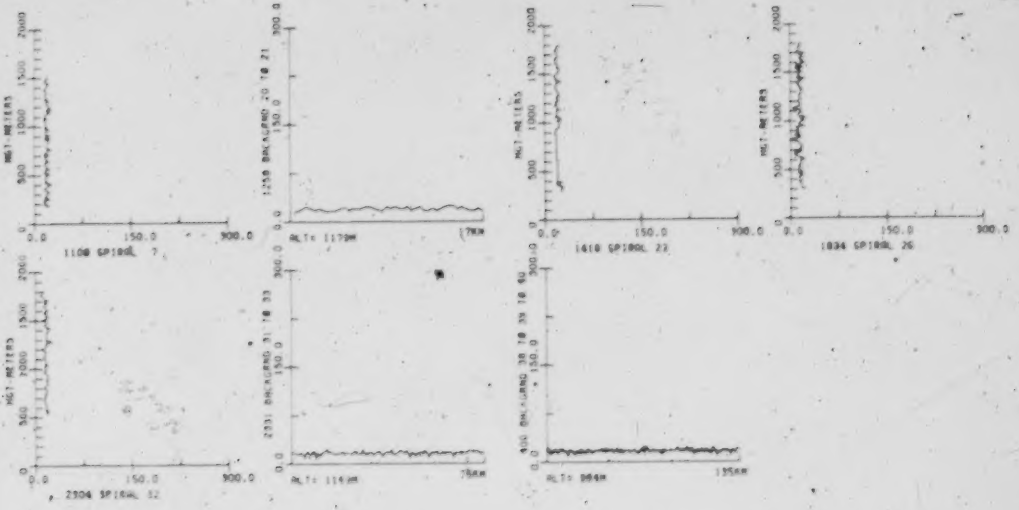
CHARGE IN MILLIVOLTS

MAP 3



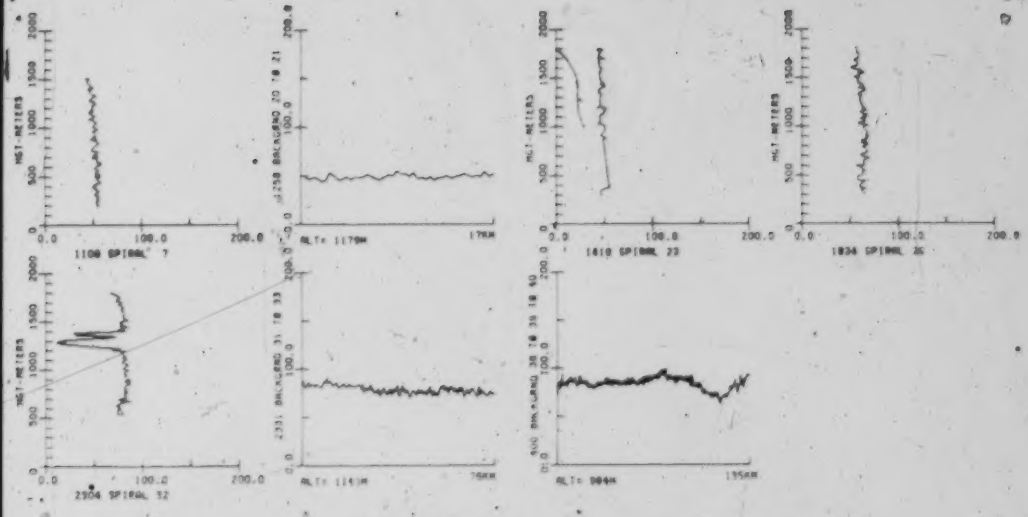
BSCAT IN $10^{-6}m^{-1}$

MAP 3



NØ IN P.P.B.

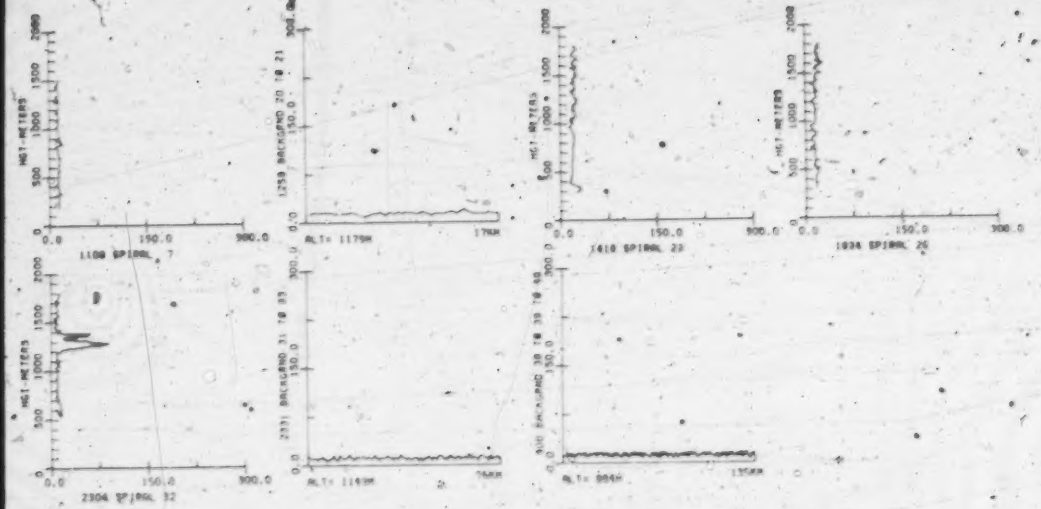
MAP 3



7

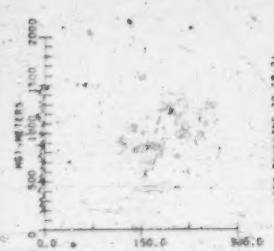
93 IN P.P.B.

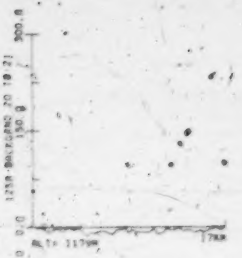
MAP 3.

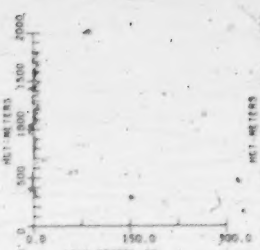


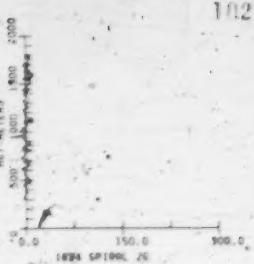
NOX IN P.P.B.

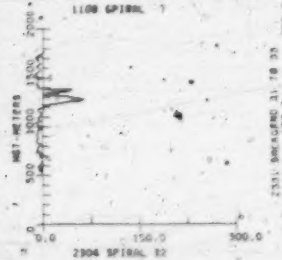
MAP 3

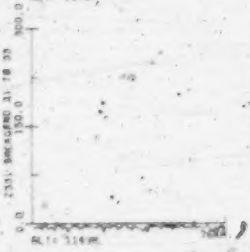


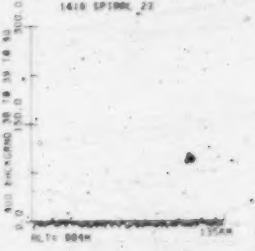






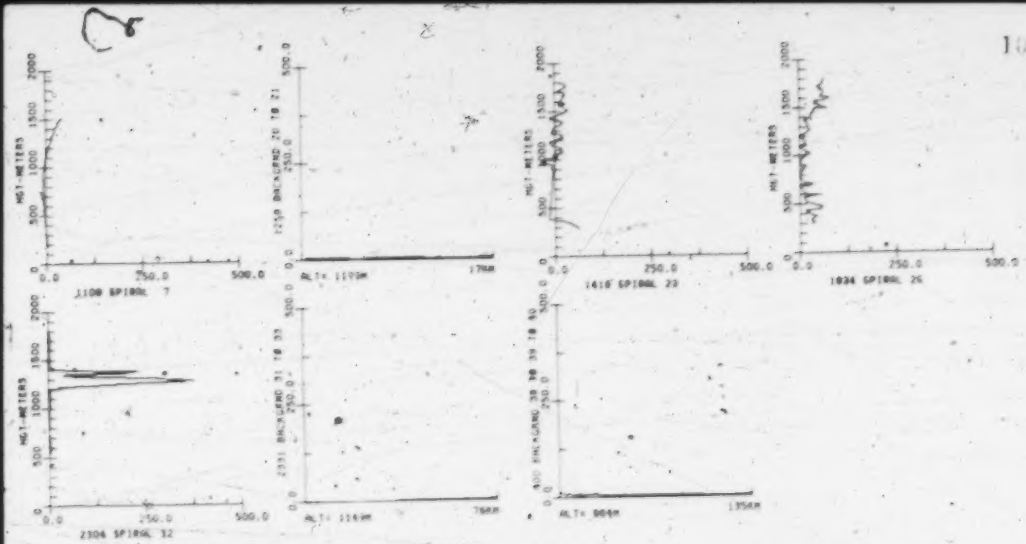






NØ2 IN P.P.B.

MAP 3

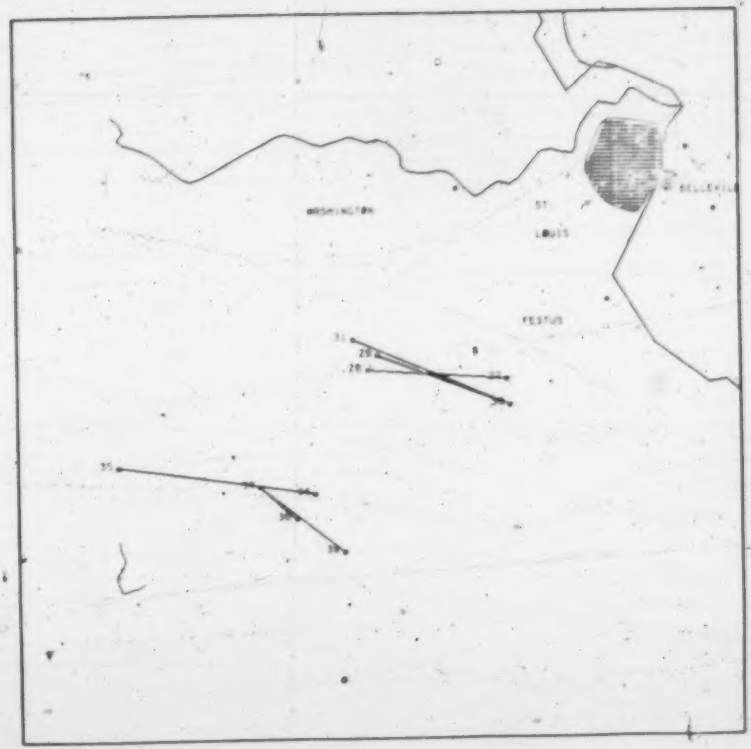


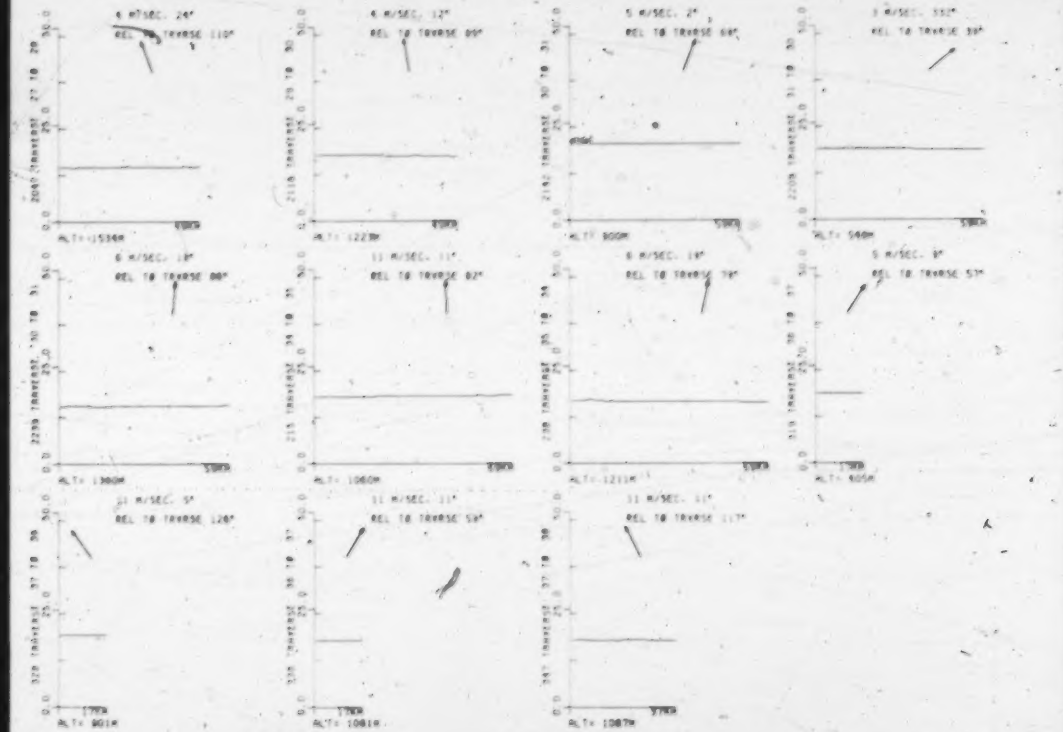
SO2 IN P.P.B.

MAP 3

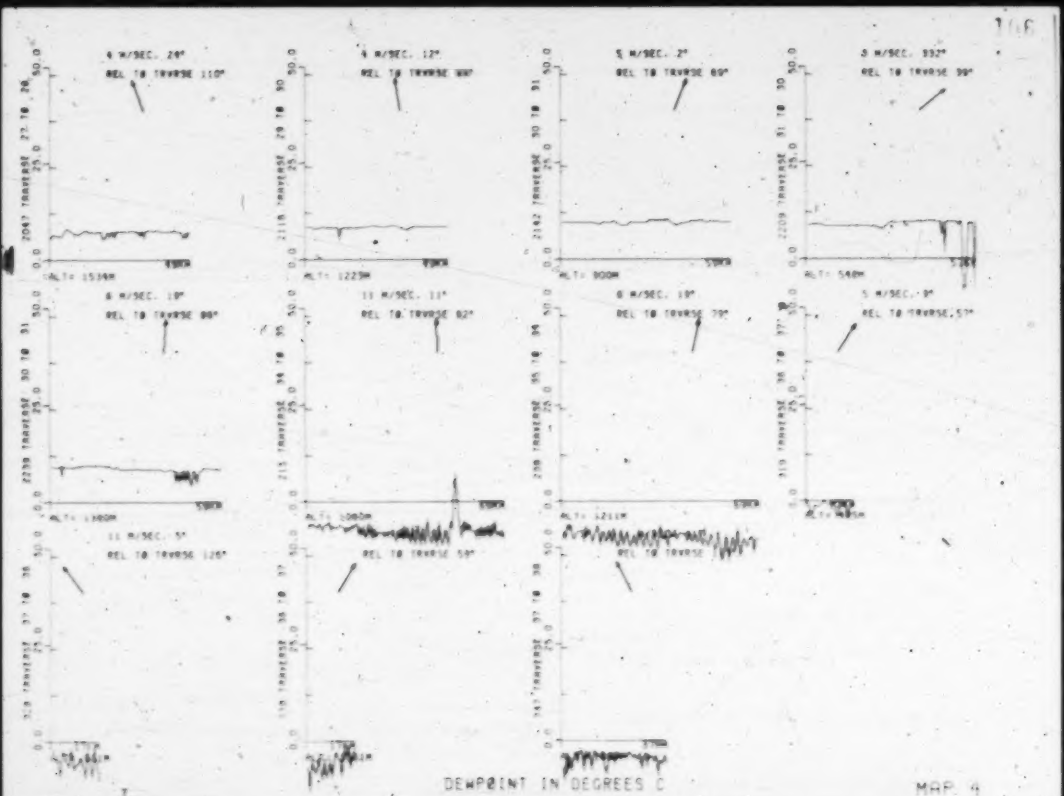
6077576

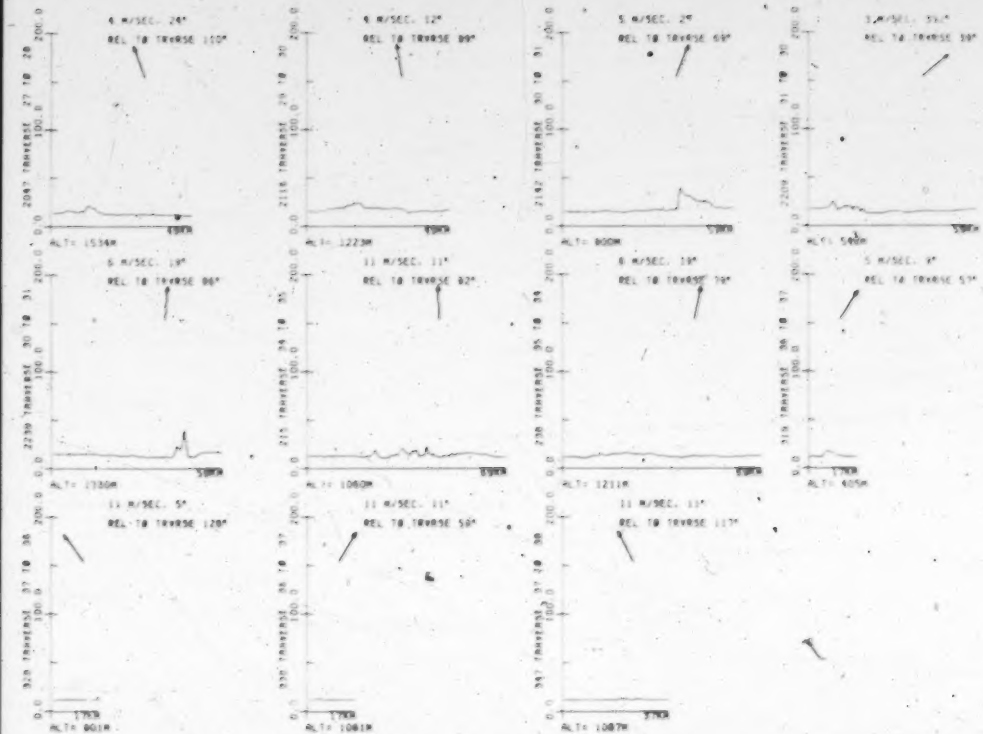
MAP 4




6 M/SEC. 24°
REL TO TRVRSE 110°
ALT= 1534M
6 M/SEC. 12°
REL TO TRVRSE 09°
ALT= 1223M
5 M/SEC. 2°
REL TO TRVRSE 68°
ALT= 900M
3 M/SEC. 332°
REL TO TRVRSE 39°
ALT= 540M
6 M/SEC. 18°
REL TO TRVRSE 08°
ALT= 1360M
11 M/SEC. 11°
REL TO TRVRSE 02°
ALT= 1060M
8 M/SEC. 18°
REL TO TRVRSE 79°
ALT= 1211M
5 M/SEC. 9°
REL TO TRVRSE 57°
ALT= 605M
11 M/SEC. 5°
REL TO TRVRSE 120°
ALT= 901M
11 M/SEC. 11°
REL TO TRVRSE 58°
ALT= 1061M
11 M/SEC. 11°
REL TO TRVRSE 117°
ALT= 1087M
TEMP IN DEGREES C

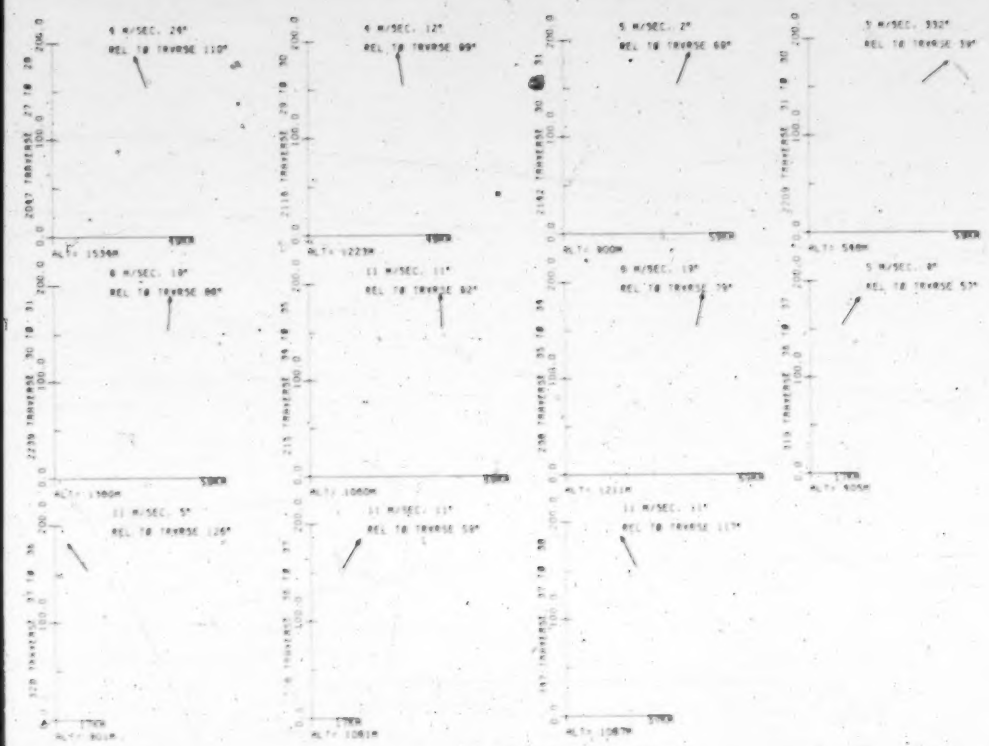
MAP 4


DEWPOINT IN DEGREES C
MAP 4

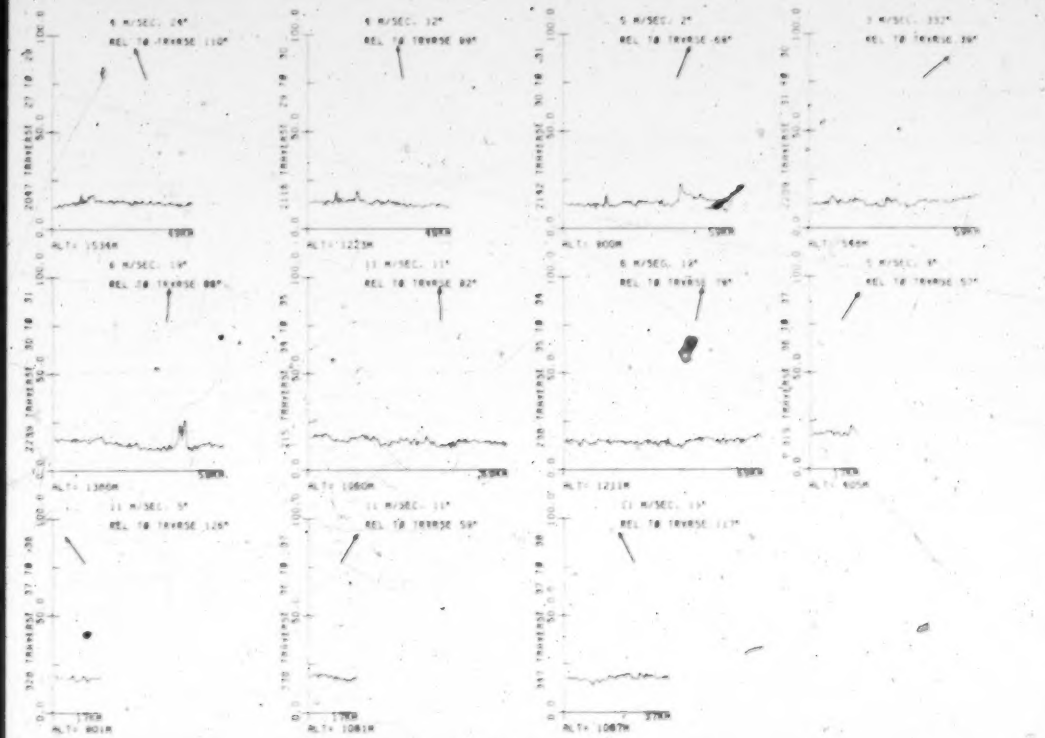


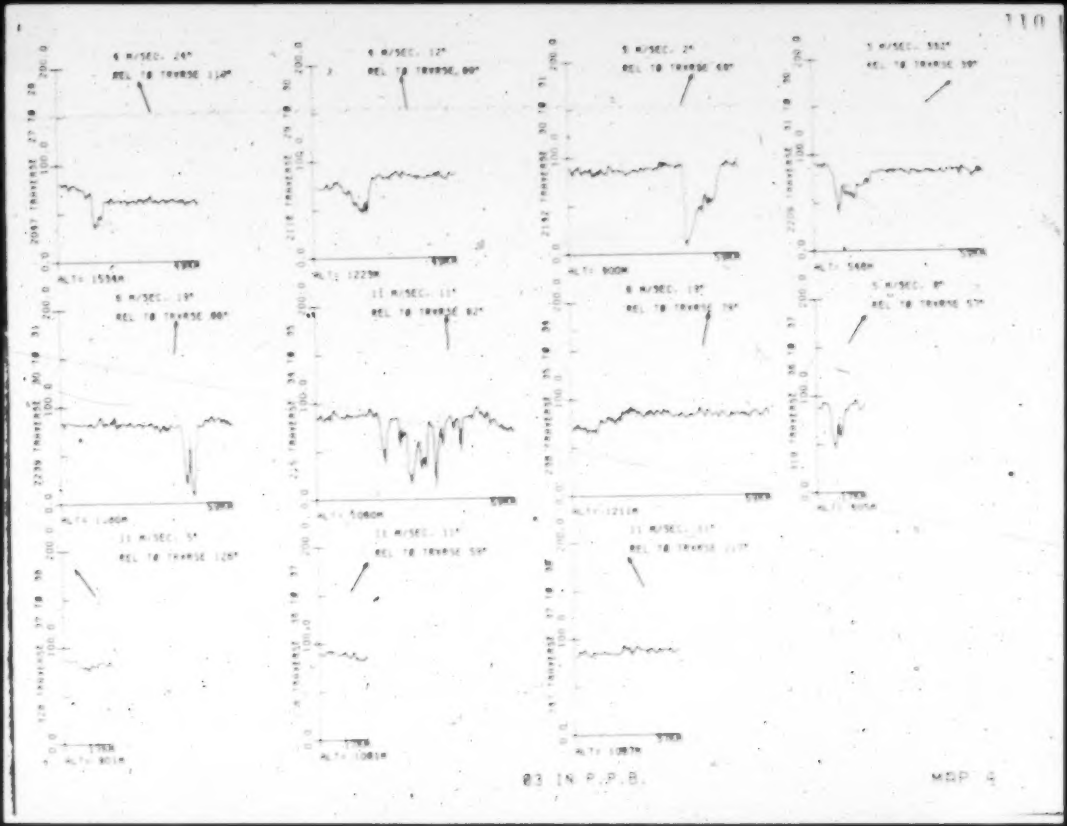
CNC IN $10^3 CM^{-3}$

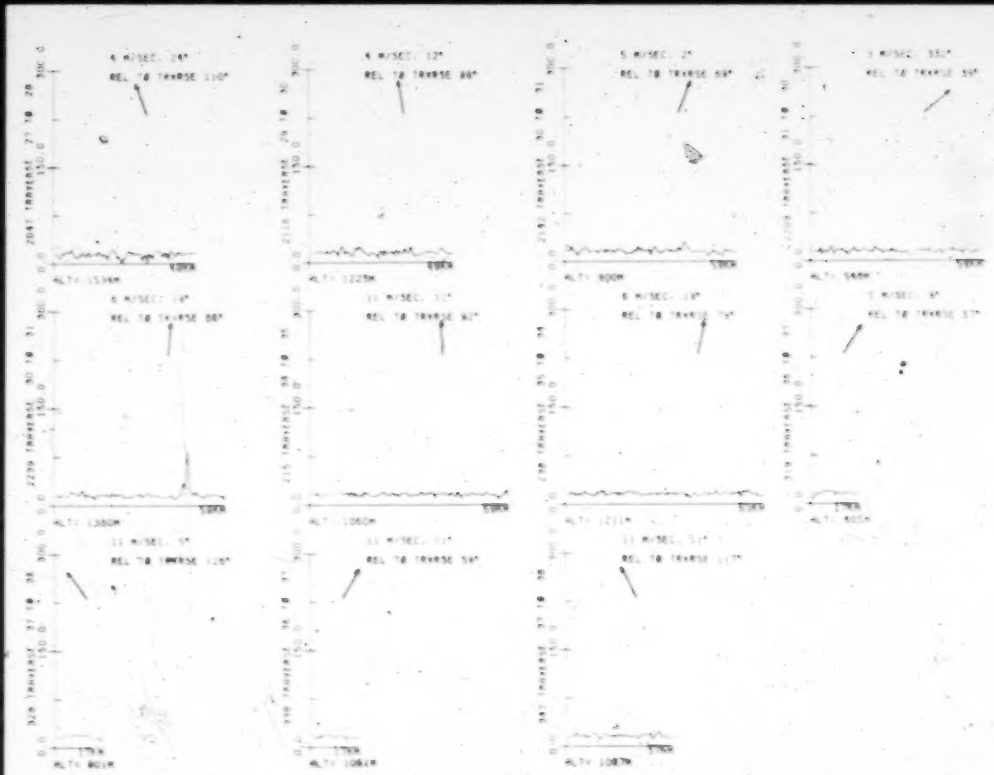
MAP 4


6 M/SEC. 24°
REL TO TRVRSE 110°
ALT: 1534M
6 M/SEC. 12°
REL TO TRVRSE 99°
ALT: 1223M
5 M/SEC. 2°
REL TO TRVRSE 68°
ALT: 900M
5 M/SEC. 332°
REL TO TRVRSE 39°
ALT: 540M
6 M/SEC. 10°
REL TO TRVRSE 80°
ALT: 1360M
11 M/SEC. 11°
REL TO TRVRSE 82°
ALT: 1060M
6 M/SEC. 13°
REL TO TRVRSE 79°
ALT: 1211M
5 M/SEC. 8°
REL TO TRVRSE 57°
ALT: 905M
11 M/SEC. 5°
REL TO TRVRSE 126°
ALT: 801M
11 M/SEC. 11°
REL TO TRVRSE 58°
ALT: 1081M
11 M/SEC. 11°
REL TO TRVRSE 117°
ALT: 1067M
CHARGE IN MILLIVOLTS

MAP 4

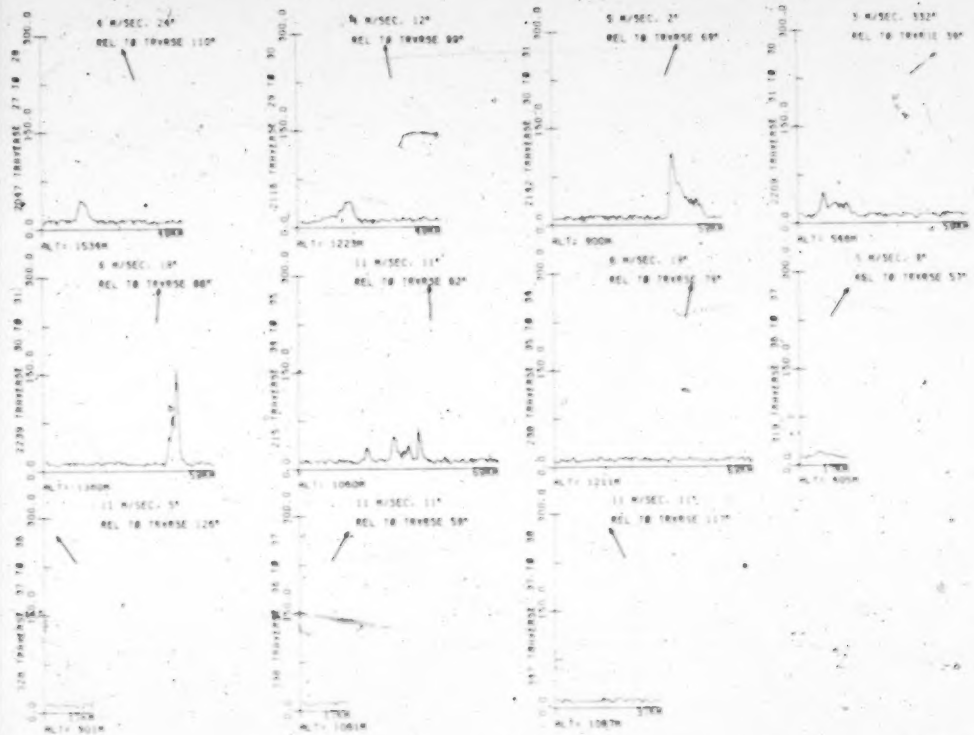

6 M/SEC. 24°
REL TO TRANSE 110°
ALT= 1534M
6 M/SEC. 12°
REL TO TRANSE 99°
ALT= 1223M
5 M/SEC. 2°
REL TO TRANSE 64°
ALT= 900M
3 M/SEC. 332°
REL TO TRANSE 30°
ALT= 546M
6 M/SEC. 14°
REL TO TRANSE 88°
ALT= 1360M
11 M/SEC. 11°
REL TO TRANSE 82°
ALT= 1060M
6 M/SEC. 14°
REL TO TRANSE 78°
ALT= 1211M
5 M/SEC. 9°
REL TO TRANSE 51°
ALT= 805M
11 M/SEC. 5°
REL TO TRANSE 126°
ALT= 801M
11 M/SEC. 11°
REL TO TRANSE 59°
ALT= 1081M
11 M/SEC. 11°
REL TO TRANSE 117°
ALT= 1087M
BSCAT IN 10⁻⁵M⁻¹
MAP 4


6 M/SEC. 24°
REL TO TRAVERSE 114°
ALT: 1534M
6 M/SEC. 12°
REL TO TRAVERSE, 80°
ALT: 1229M
9 M/SEC. 2°
REL TO TRAVERSE 60°
ALT: 900M
9 M/SEC. 355°
REL TO TRAVERSE 39°
ALT: 540M
6 M/SEC. 19°
REL TO TRAVERSE 88°
ALT: 1480M
11 M/SEC. 11°
REL TO TRAVERSE 82°
ALT: 1080M
6 M/SEC. 19°
REL TO TRAVERSE 76°
ALT: 1210M
5 M/SEC. 8°
REL TO TRAVERSE 57°
ALT: 600M
11 M/SEC. 5°
REL TO TRAVERSE 126°
ALT: 901M
11 M/SEC. 11°
REL TO TRAVERSE 59°
ALT: 1081M
11 M/SEC. 11°
REL TO TRAVERSE 117°
ALT: 1387M



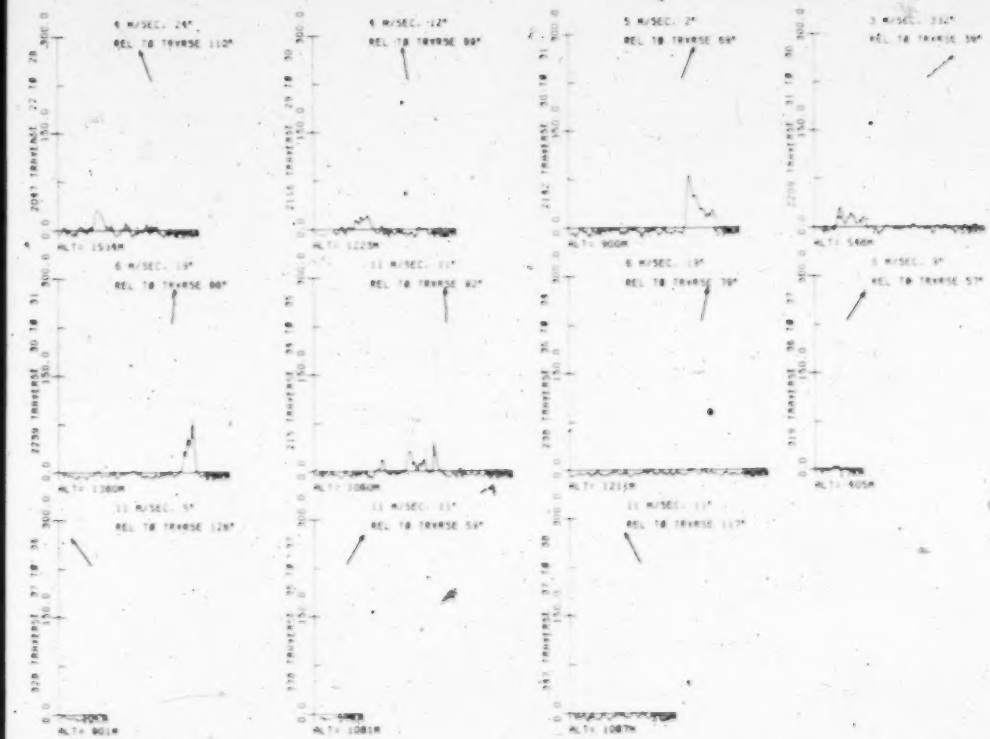
NO IN P.P.B.

MAP 4



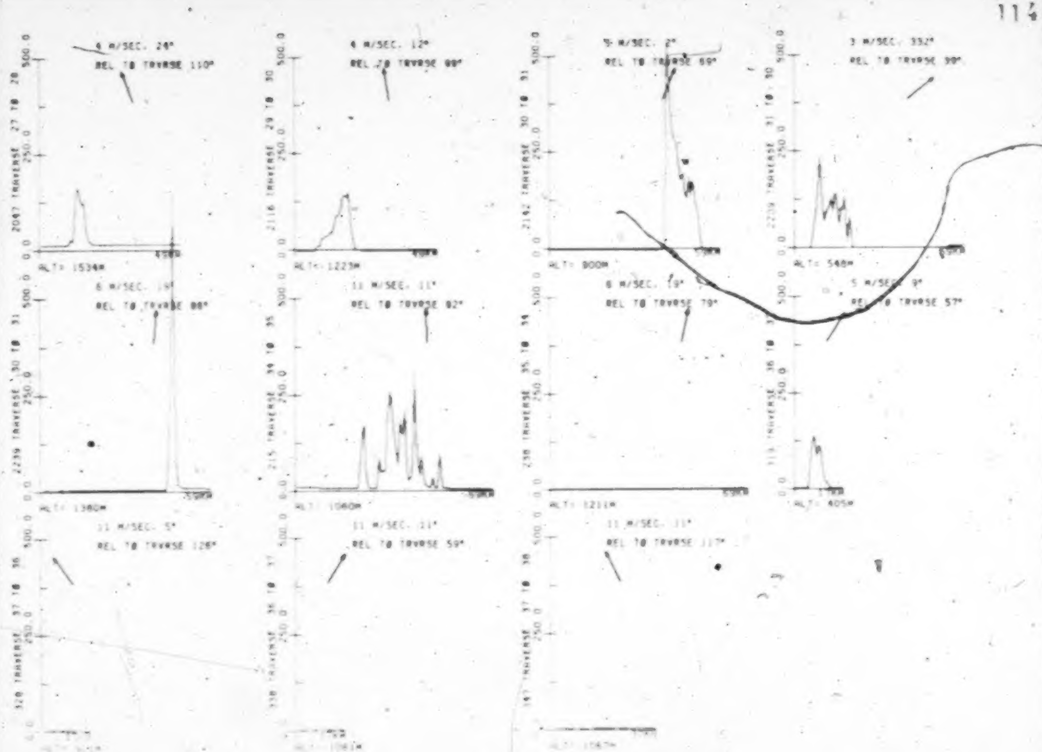
NOX IN P.P.B.

MAP 4



N82 IN P.P.B.

MAP 4

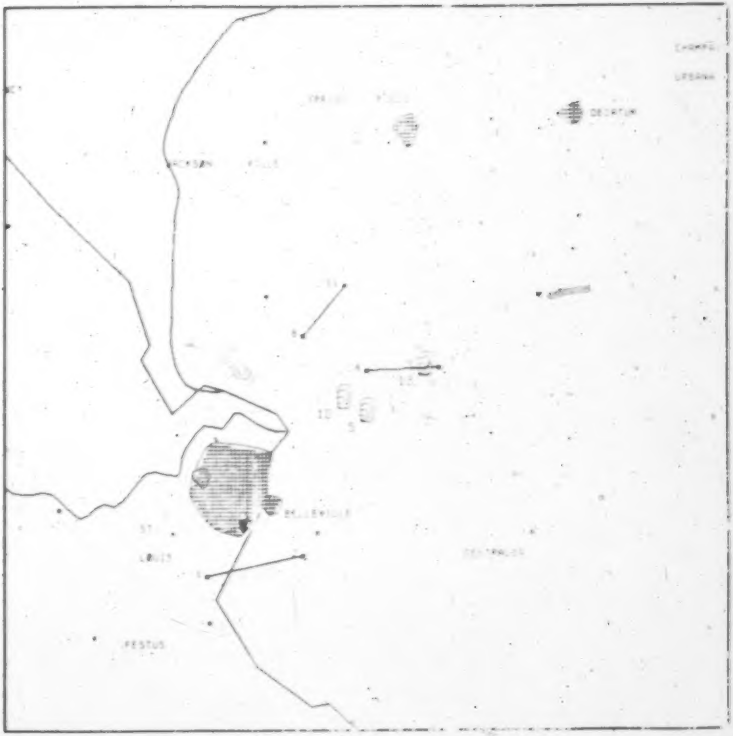


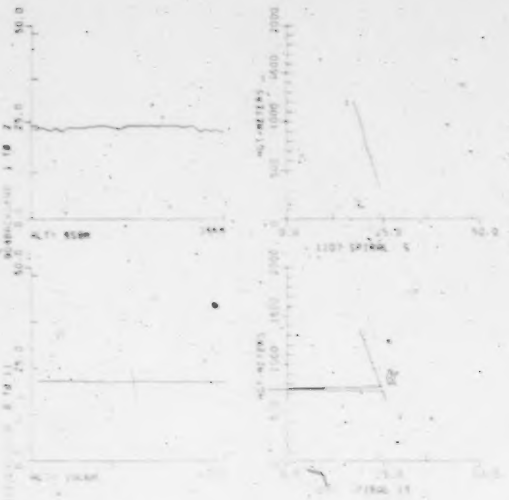
302 19 P.F.B.

MAP 4

8097776

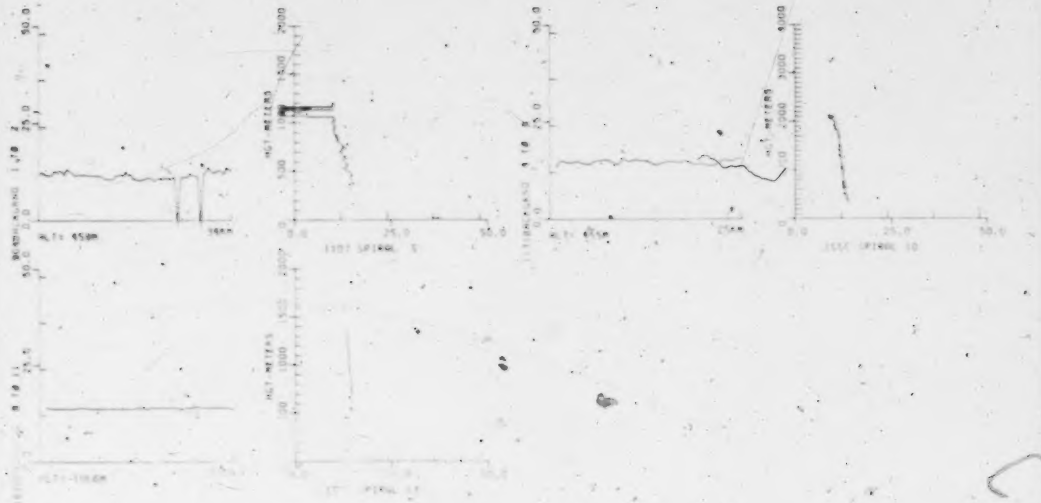
MAP 6





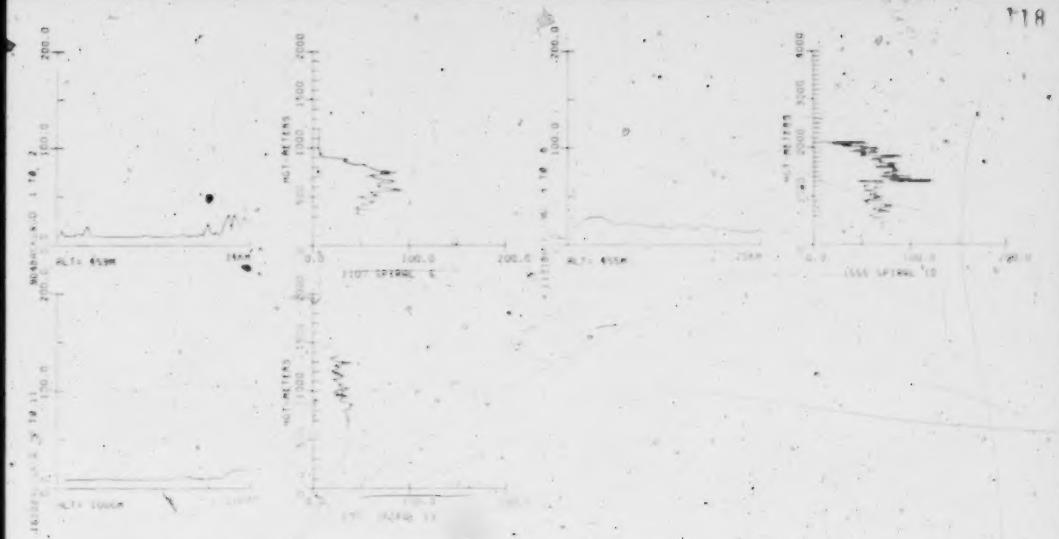
TEMP IN DEGREES C

MAP 4



DEWPRINT IN DEGREES C

MAP 4

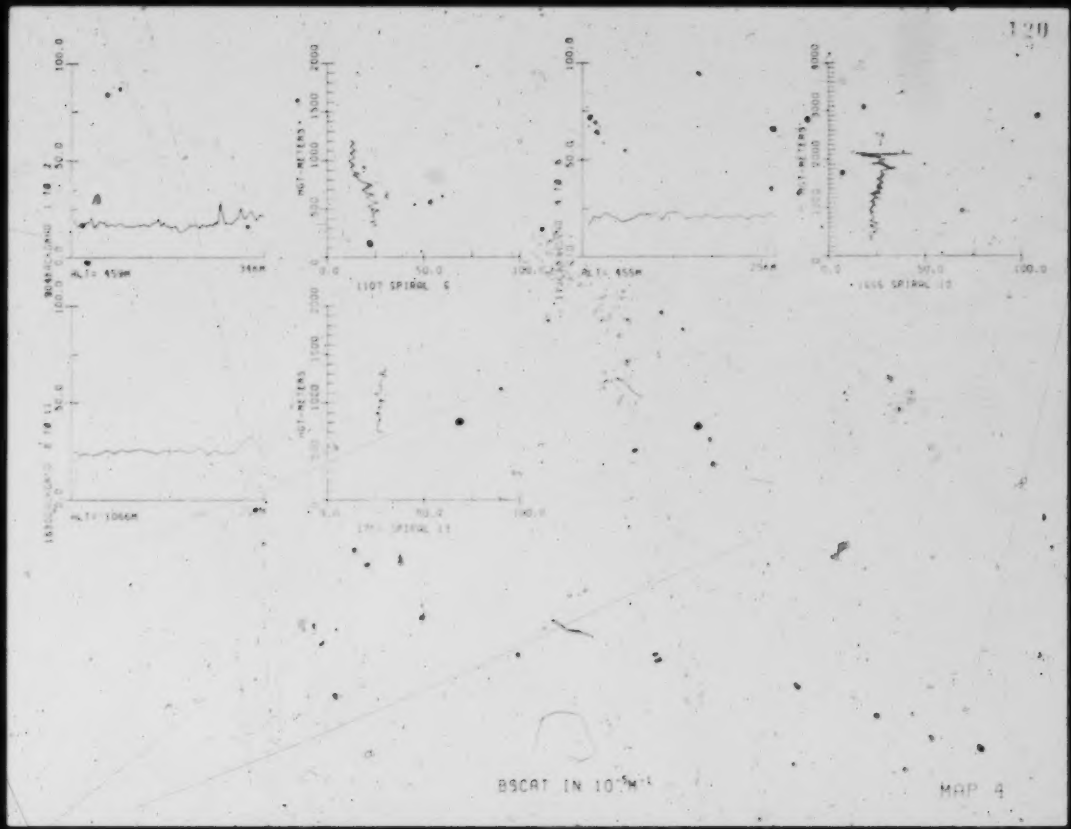


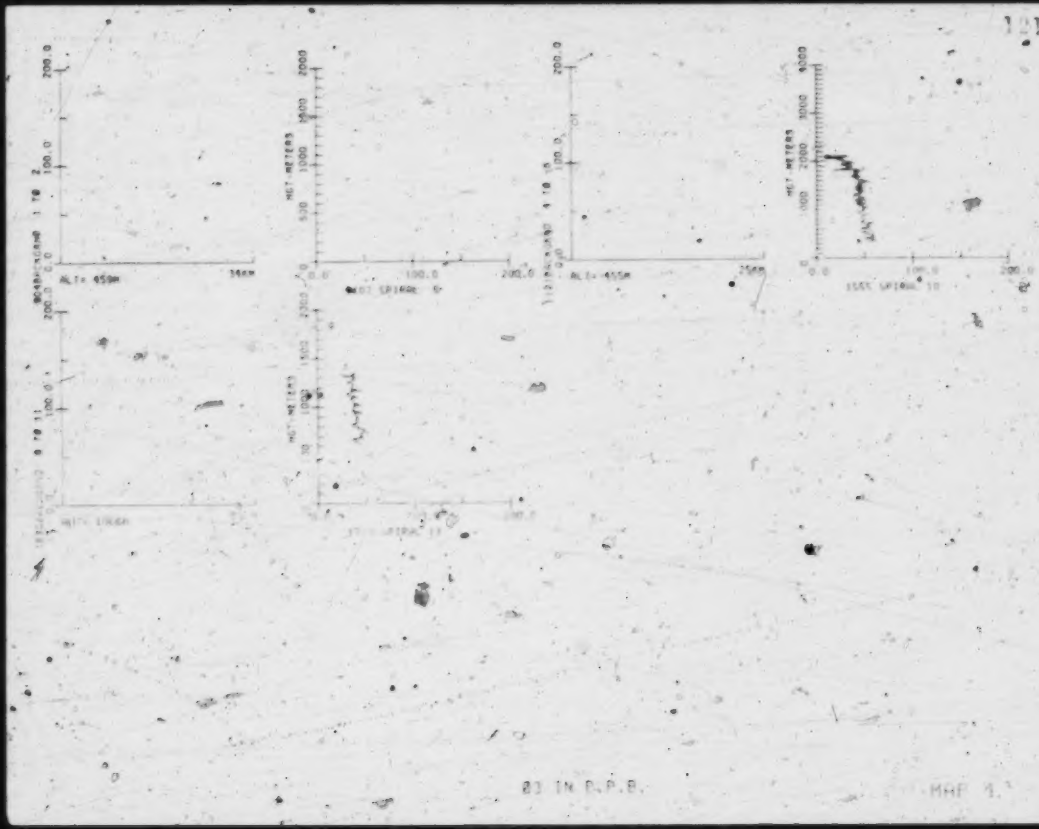
CNC IN $10^3 CM^{-3}$

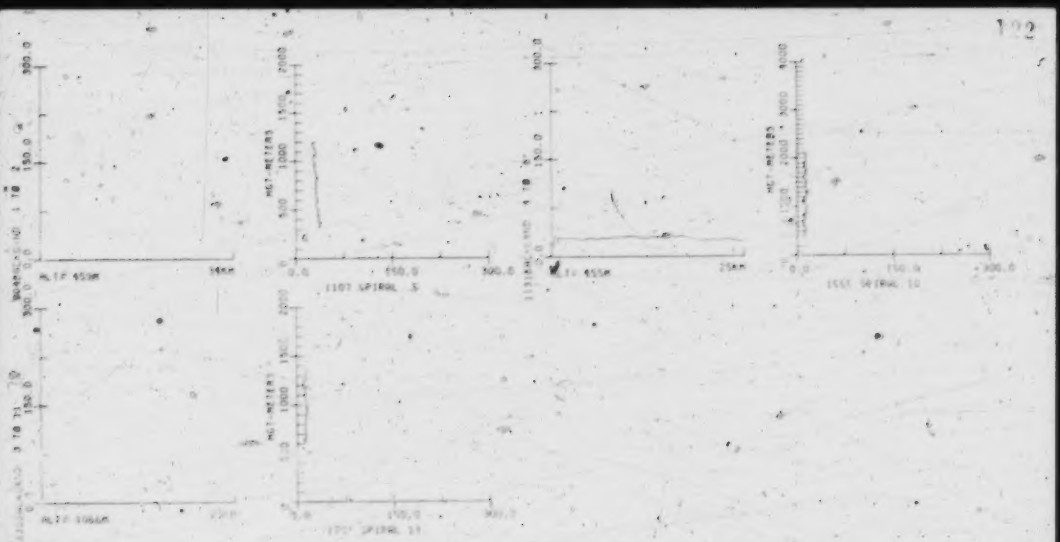
MAP 4

CHARGE IN MILLIVOLTS

MAP 4

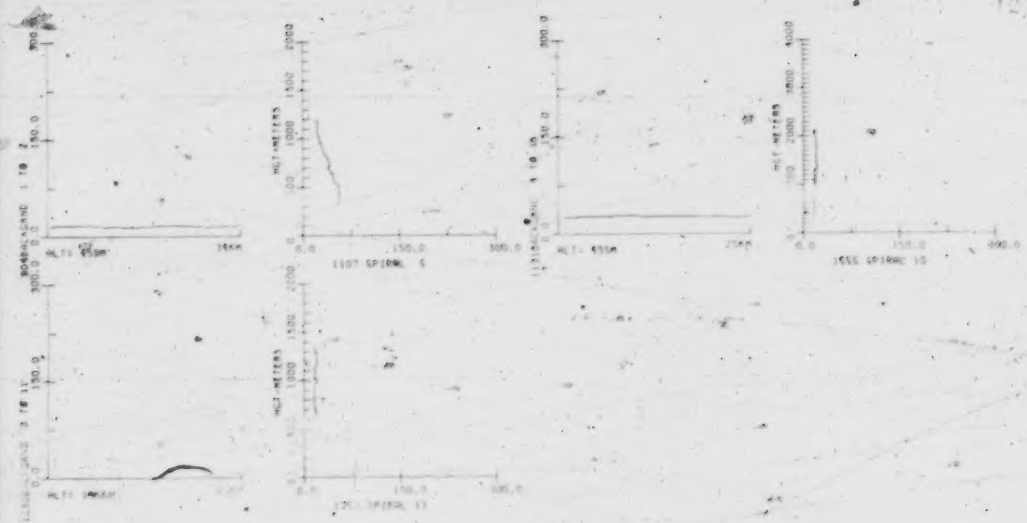

BSCAT IN 10⁻⁶M⁻¹
MAP 4





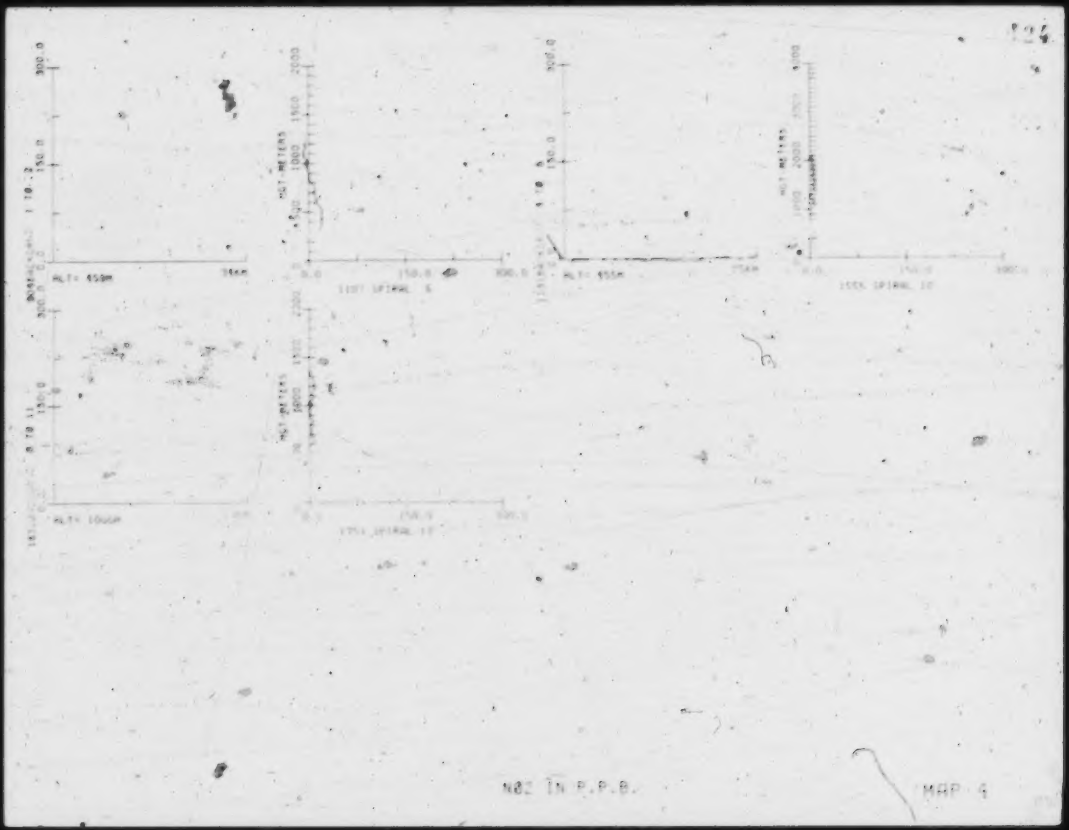
NØ IN P.P.B.

MAP 4



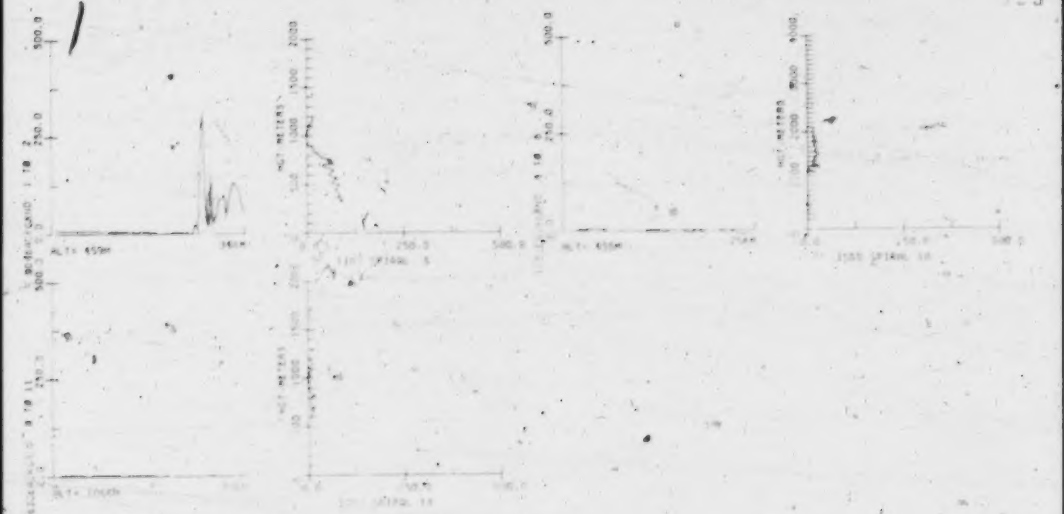
NOT IN P.P.B.

MAP 4



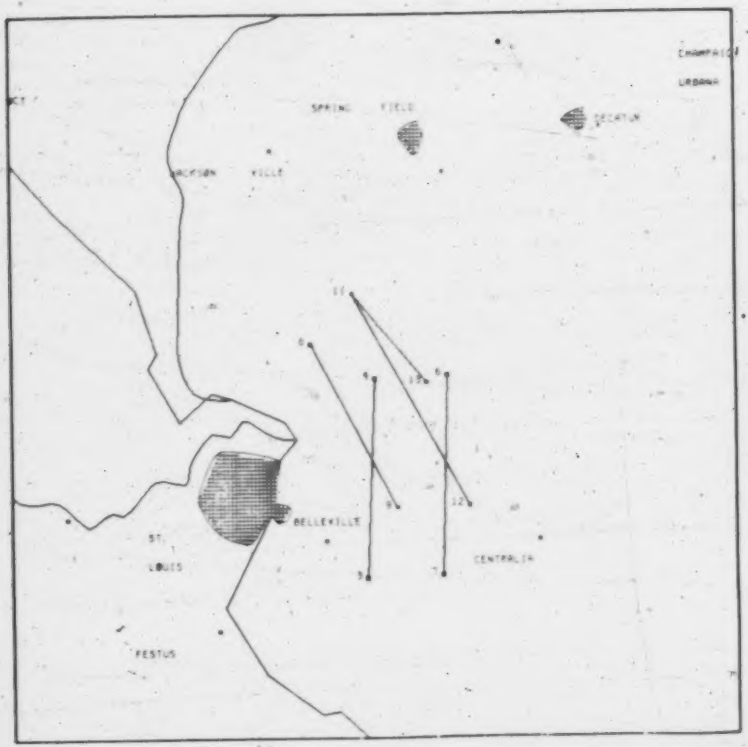
NOT IN P.P.B.

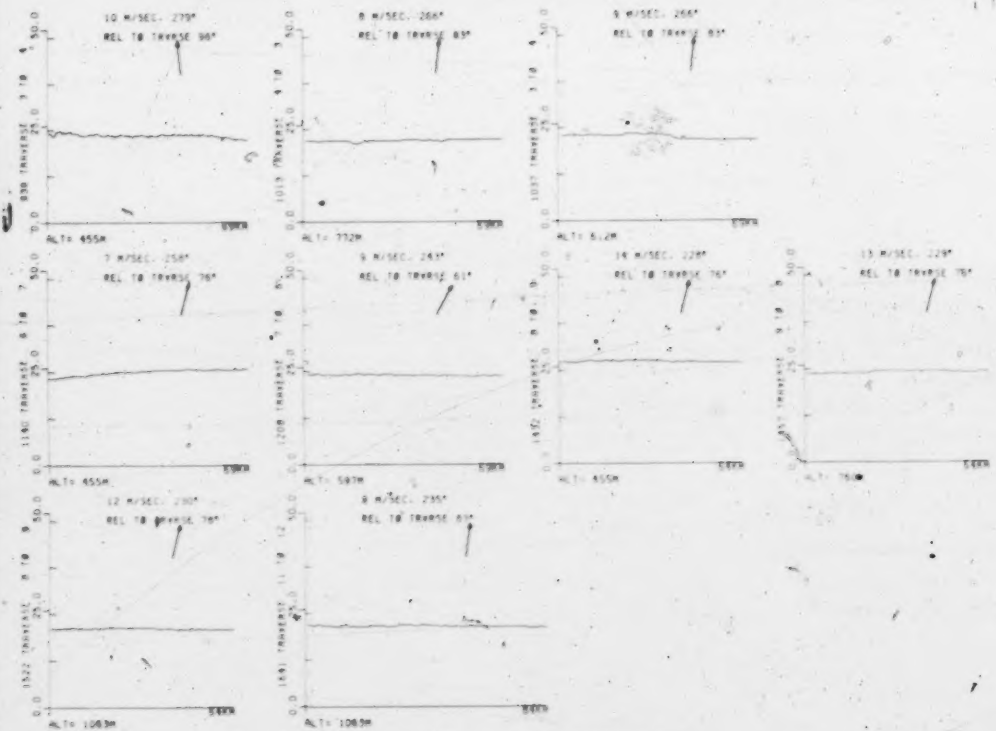
MAP 4

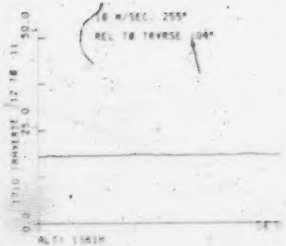


6097778

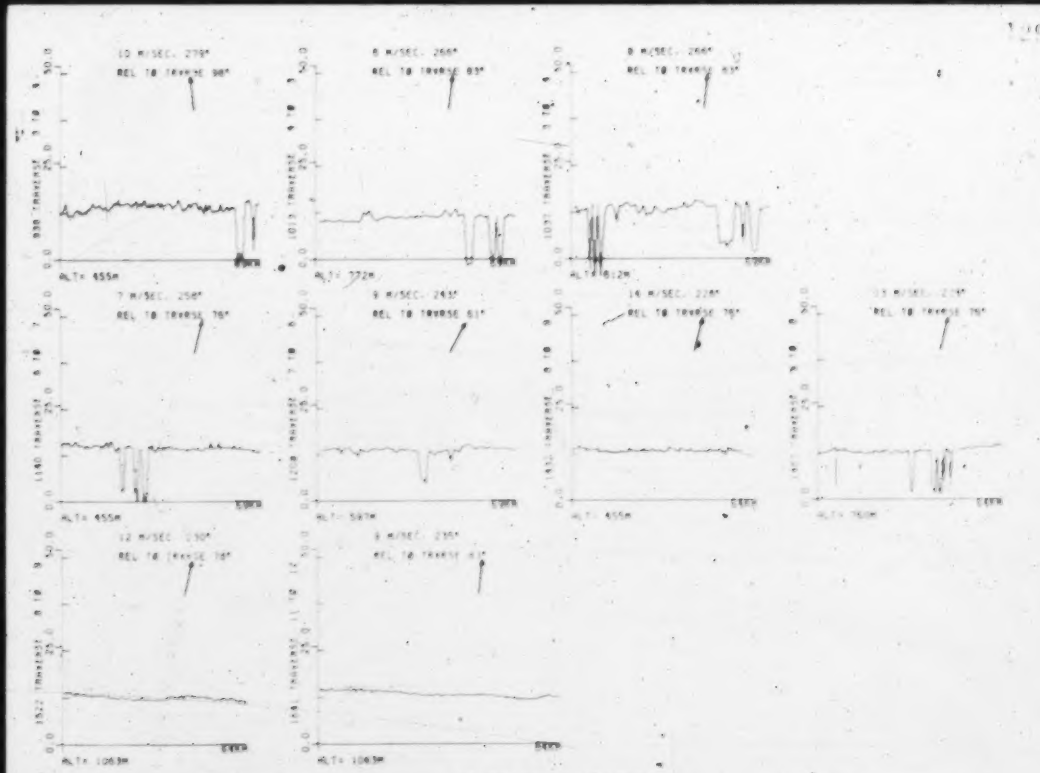
MAP 5

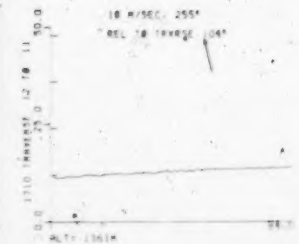



10 M/SEC. 270°
REL TO TRANSEC 90°
ALT= 455M
8 M/SEC. 266°
REL TO TRANSEC 85°
ALT= 772M
9 M/SEC. 266°
REL TO TRANSEC 85°
ALT= 6.2M
7 M/SEC. 258°
REL TO TRANSEC 76°
ALT= 455M
9 M/SEC. 243°
REL TO TRANSEC 61°
ALT= 597M
14 M/SEC. 229°
REL TO TRANSEC 76°
ALT= 455M
13 M/SEC. 229°
REL TO TRANSEC 76°
12 M/SEC. 230°
REL TO TRANSEC 76°
ALT= 1083M
8 M/SEC. 235°
REL TO TRANSEC 81°
ALT= 1083M
TEMP IN DEGREES C.

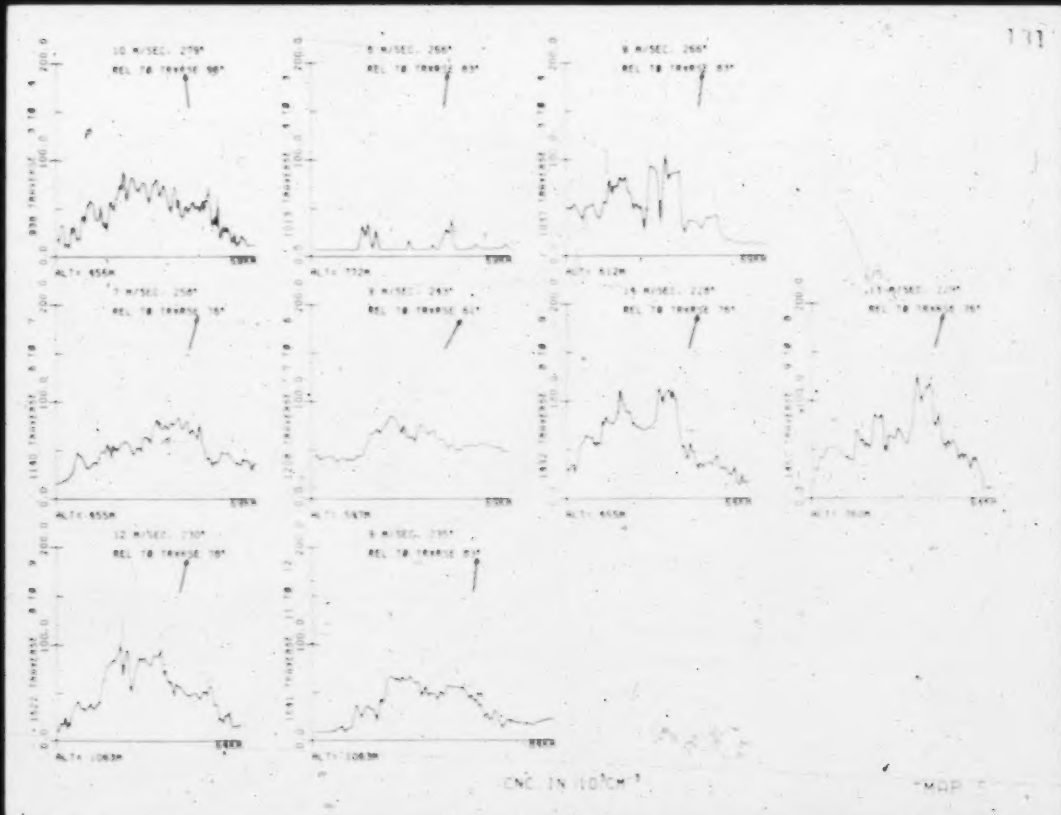


TEMP IN DEGREES C

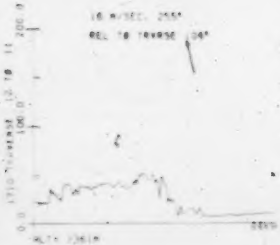

DEWPOINT IN DEGREES C



DEWPOINT IN DEGREES C

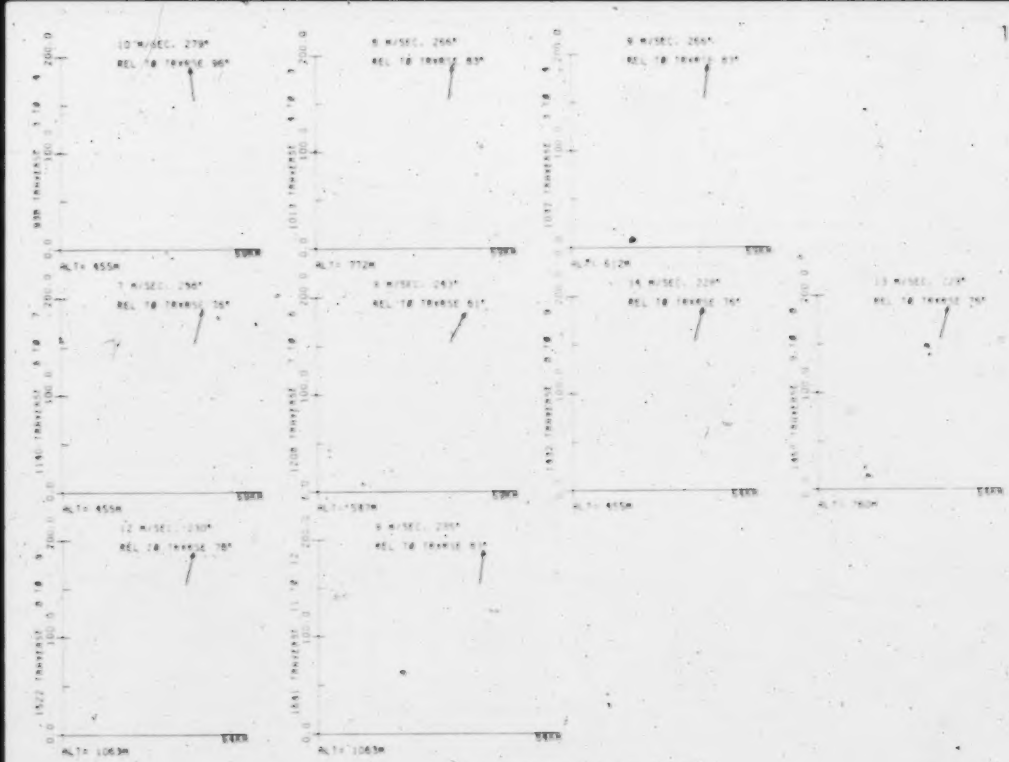


10 M/SEC. 279°
REL TO TRVRSE 98°
ALT= 456M
8 M/SEC. 266°
REL TO TRVRSE 83°
ALT= 772M
9 M/SEC. 266°
REL TO TRVRSE 83°
ALT= 612M
7 M/SEC. 258°
REL TO TRVRSE 76°
ALT= 455M
9 M/SEC. 243°
REL TO TRVRSE 61°
ALT= 587M
14 M/SEC. 228°
REL TO TRVRSE 76°
ALT= 455M
13 M/SEC. 229°
REL TO TRVRSE 76°
ALT= 760M
12 M/SEC. 230°
REL TO TRVRSE 78°
ALT= 1063M
9 M/SEC. 235°
REL TO TRVRSE 83°
ALT= 1063M
CNC IN 10³CM⁻³
MAP 5

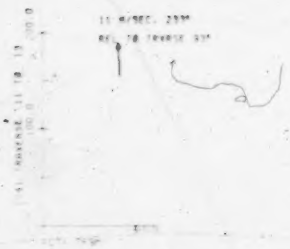


CNC IN $10^3 CM^{-3}$

MAP 5

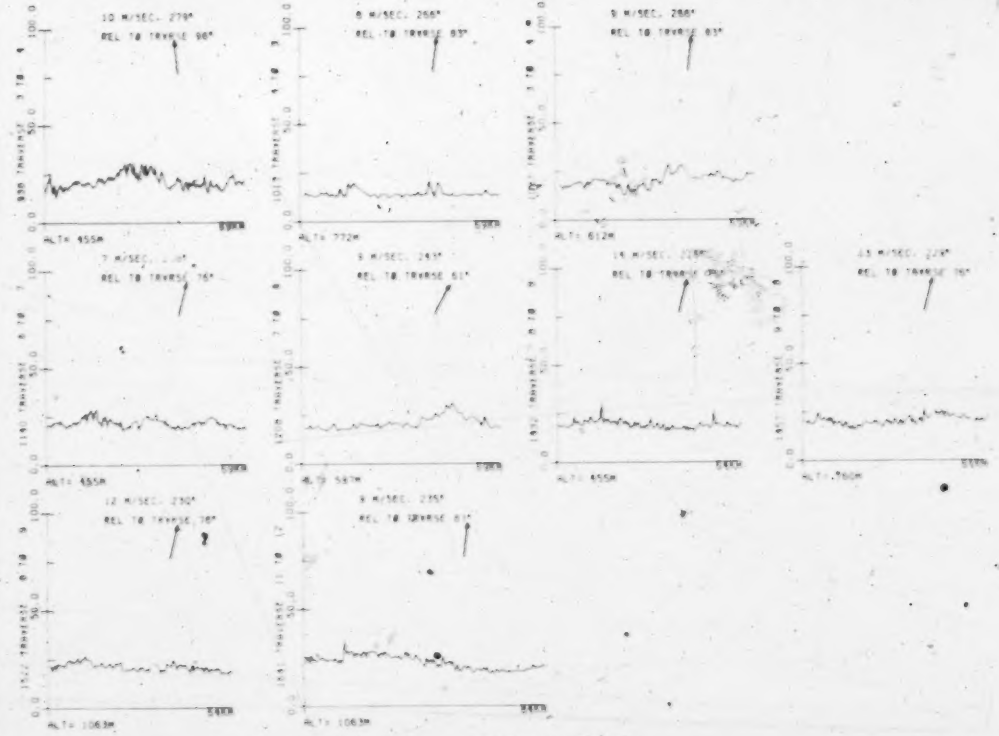

CHARGE IN MILLIVOLTS

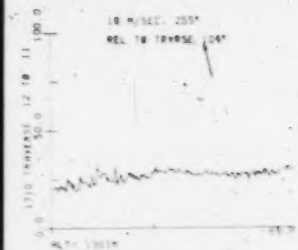
G 14



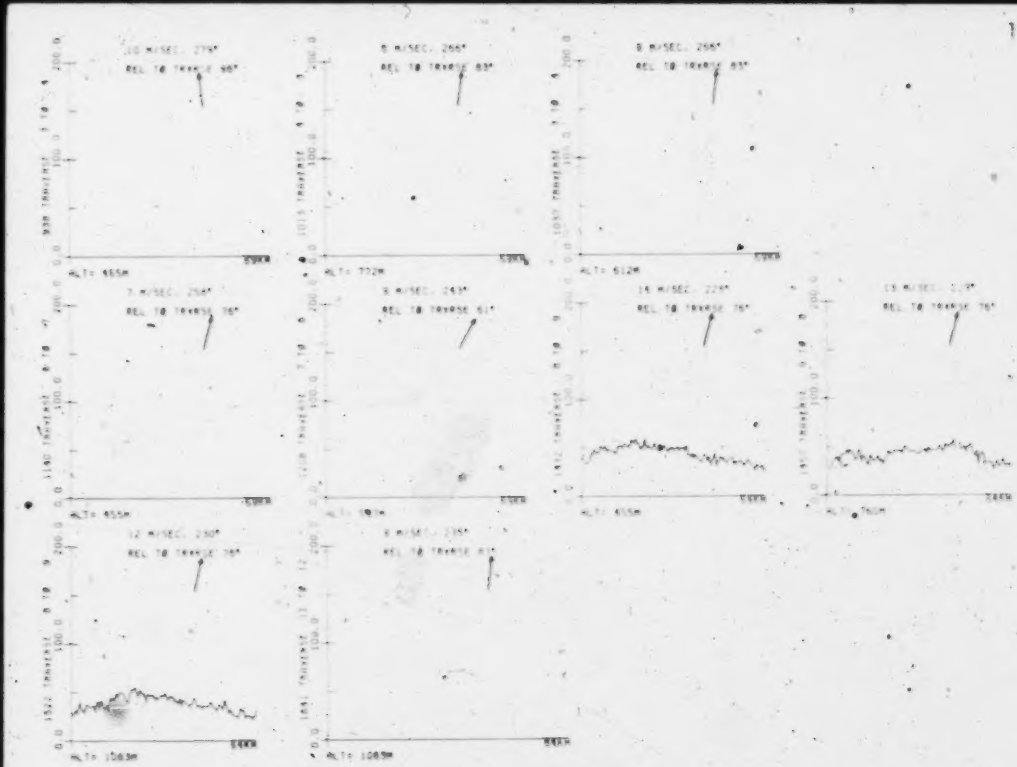
CHARGE IN MILLIVOLTS

MAP 5


10 M/SEC. 270°
REL TO TRANSEC 90°
ALT: 455M
8 M/SEC. 266°
REL TO TRANSEC 83°
ALT: 772M
9 M/SEC. 268°
REL TO TRANSEC 83°
ALT: 612M
7 M/SEC. 260°
REL TO TRANSEC 76°
ALT: 455M
8 M/SEC. 243°
REL TO TRANSEC 61°
ALT: 587M
14 M/SEC. 228°
REL TO TRANSEC 46°
ALT: 455M
13 M/SEC. 227°
REL TO TRANSEC 76°
12 M/SEC. 230°
REL TO TRANSEC 76°
ALT: 1063M
9 M/SEC. 235°
REL TO TRANSEC 61°
ALT: 1063M
BSCAT IN $10^{-6}M^{-1}$

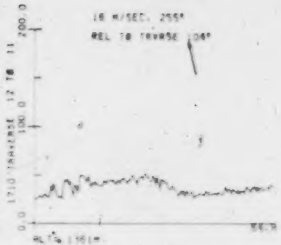

10 M/SEC. 205°
REL TO TRANSEC 104°

11 M/SEC. 233°
REL TO TRANSEC 97°

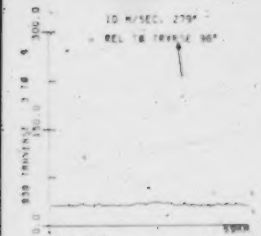


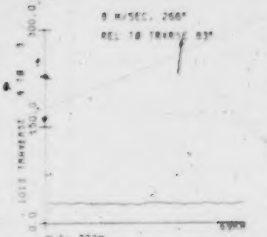
23 IN P.P.B.

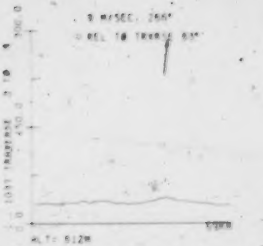
MAP 5.

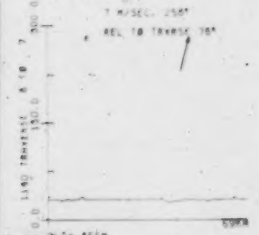

18 M/SEC. 255°
REL TO TRAVASE 104°
1710 TRAVERSE 12 TO 11
200.0
100.0
0.0

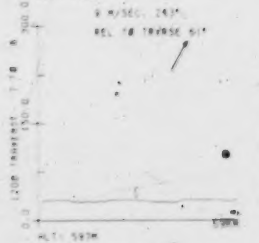
11 M/SEC. 233°
REL TO TRAVASE 93°
200.0
100.0

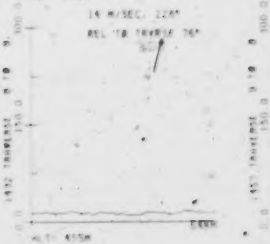


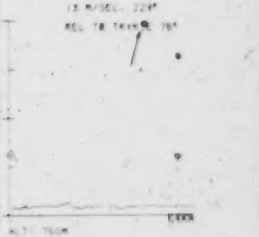


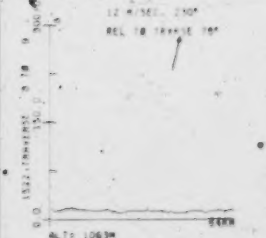


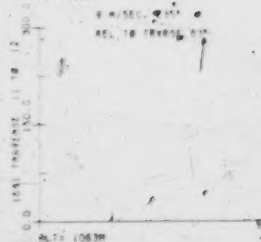






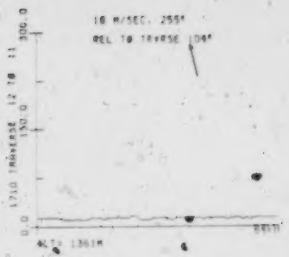






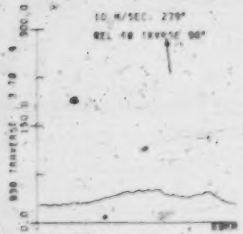
NØ IN P.P.B.

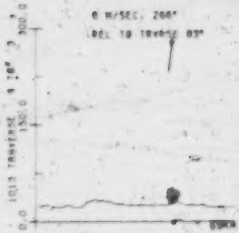
MHP 5

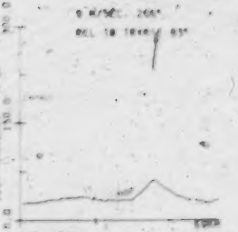

16 M/SEC. 255°
REL TO TRVRSE 104°
1710 TRAVERSE 12 TO 11
300.0
150.0
0.0

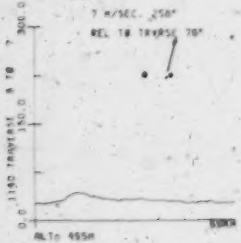
11 M/SEC. 259°
REL TO TRVRSE 93°
300.0
150.0

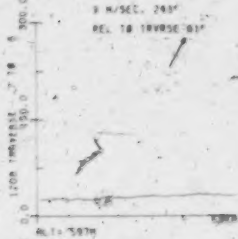
* NØ IN P.P.B.

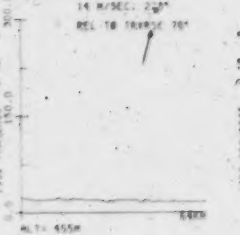


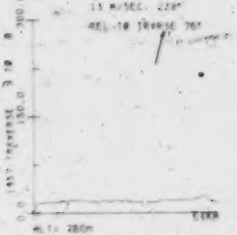


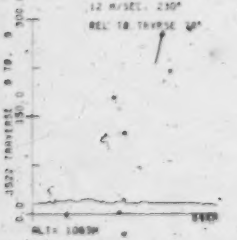


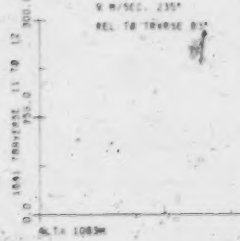










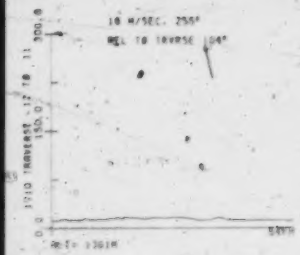


NOX IN P.P.B.

MAP 5

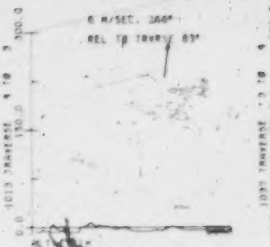
A02

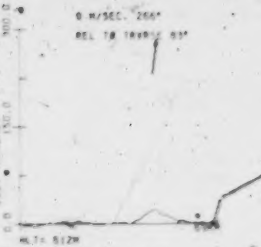
142

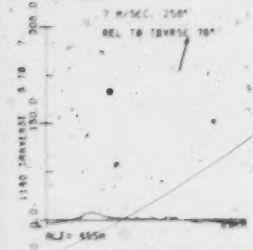


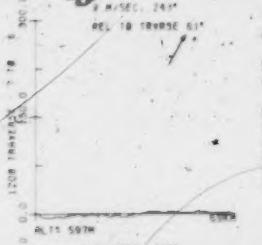
NØX IN P.P.B.

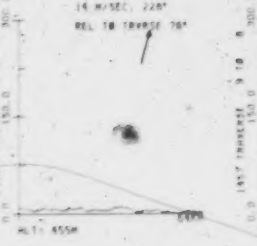
MAP

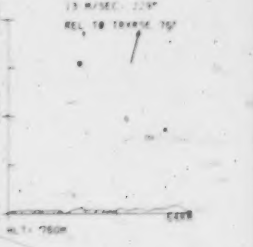


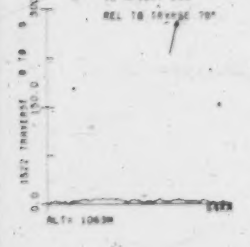


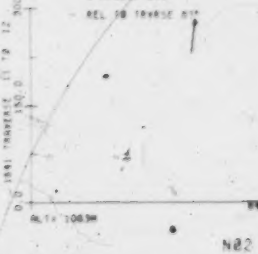






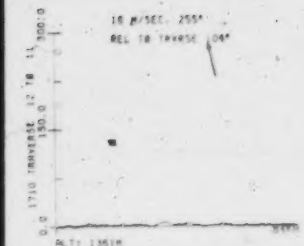






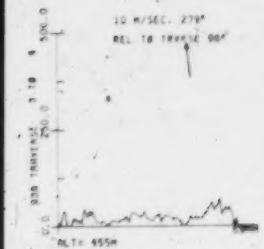
N02 IN P.P.B.

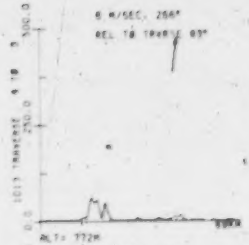
MAR 5

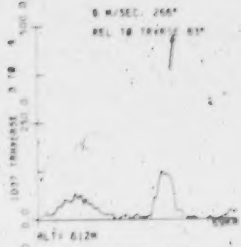


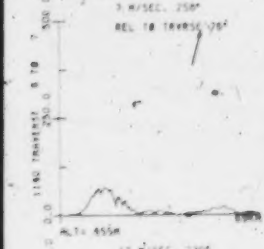
N02 IN P.P.B.

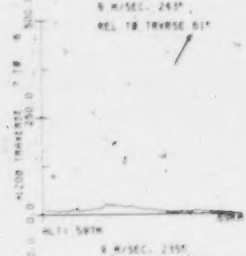
MAP 5

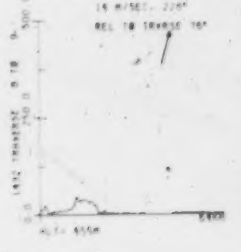


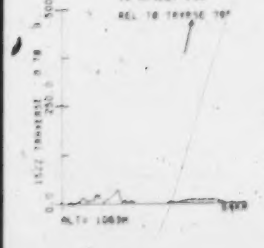


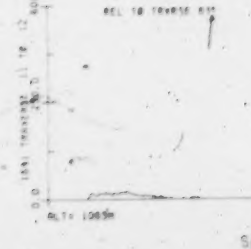








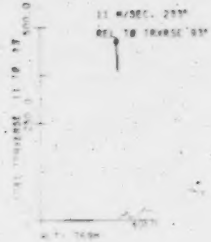




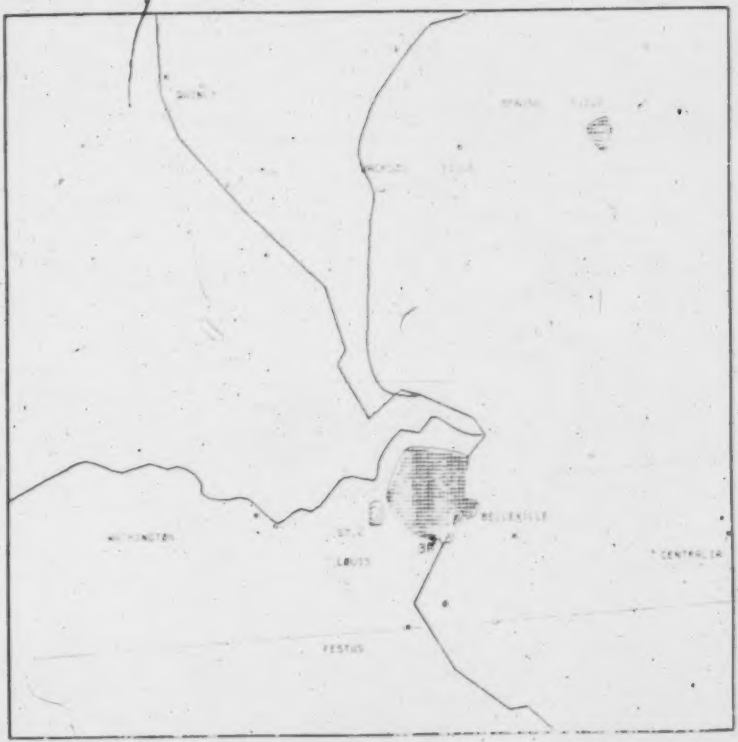
SØ2 IN P.P.B.

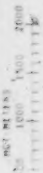
MAP 5

10 M/SEC. 255°
REL TO TRVRSE 104°
1710 TRAVERSE 12 TO 11
500.0
250.0
0.0
ALT= 1361M
0
28 M


11 M/SEC. 233°
REL TO TRVRSE 93°
500.0
250.0
ALT= 769M

61371476





TEMP IN DEGREES C

MAP 5

HGT-METERS
500 1000 1500 2000

HGT-METERS
500 1000 1500 2000

HGT-METERS
500 1000 1500 2000

HGT-METERS
500 1000 1500 2000

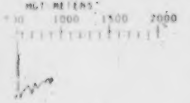
DEWPOINT IN DEGREES C

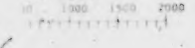
CNC IN 10 CM

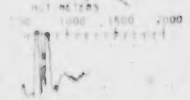
MAP 5

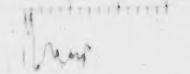
CHARGE IN MILLIVOLTS

BSCAT IN 10⁻⁵M⁻¹
MAP 5


1000
1500
2000

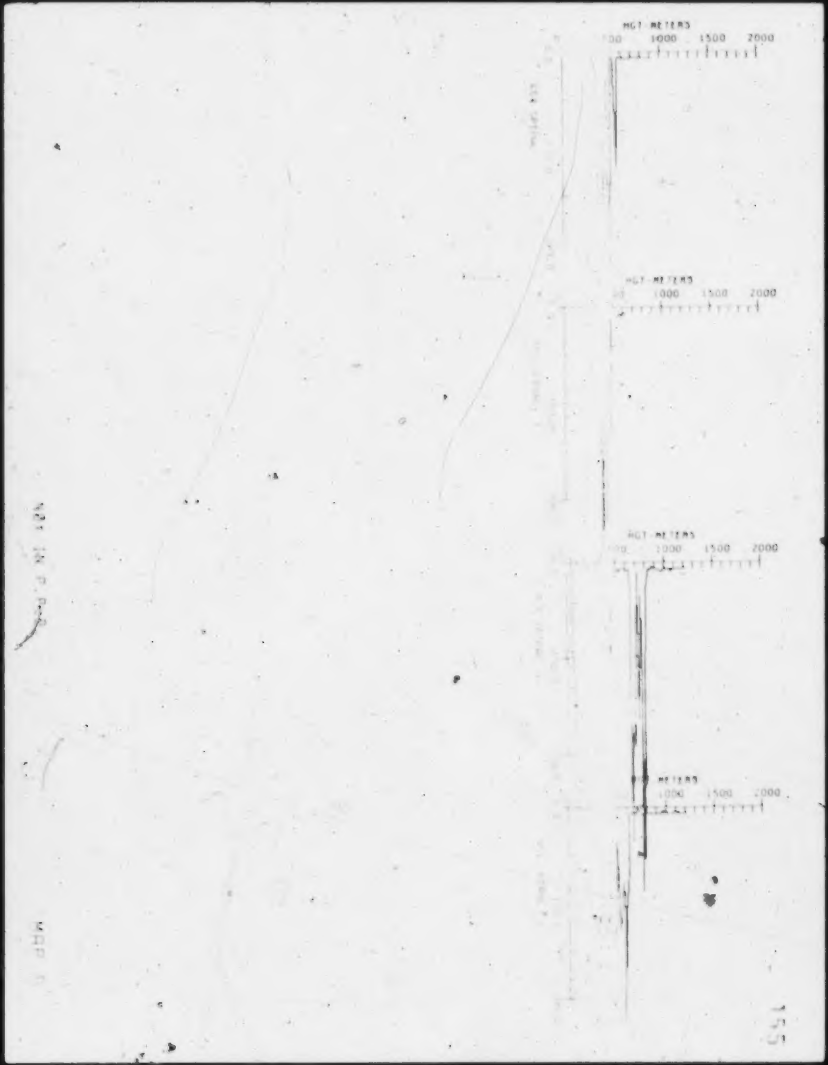

1000
1500
2000

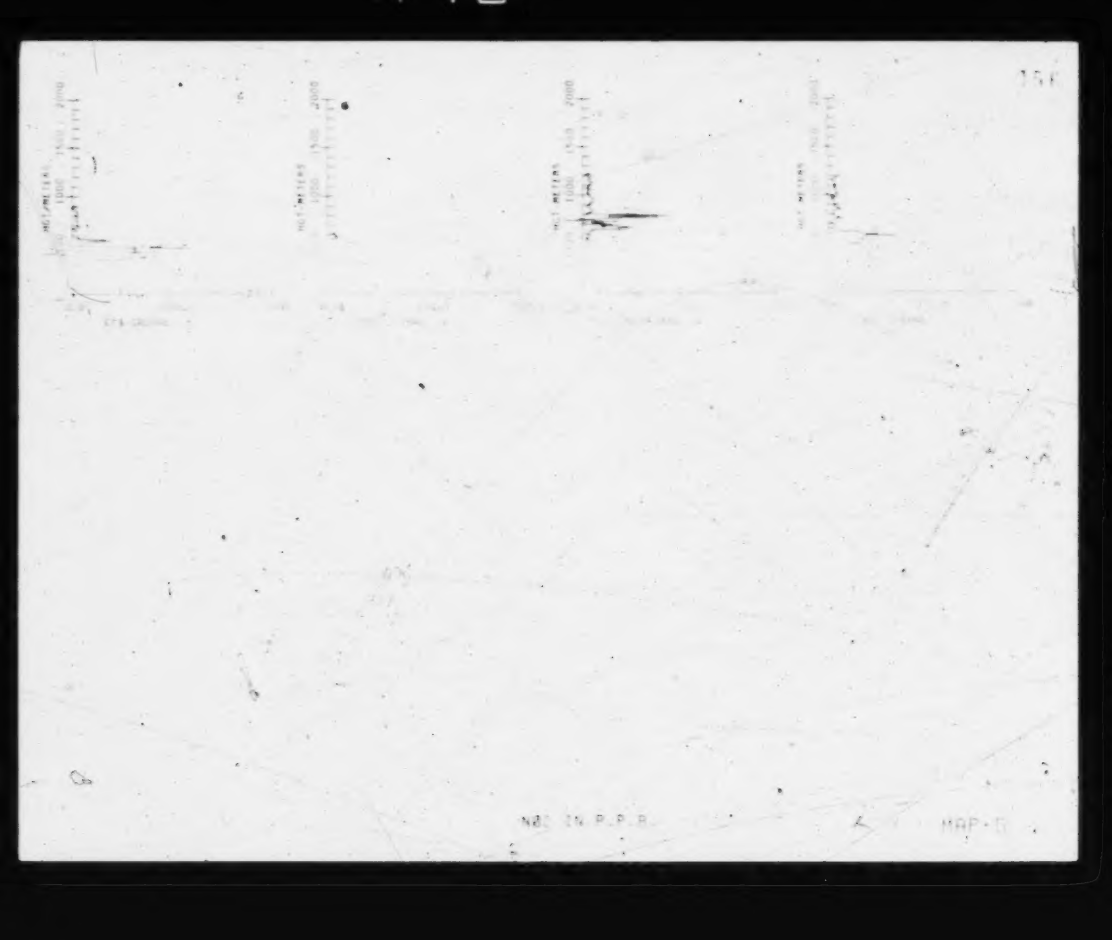

1000
1500
2000


1000
1500
2000

N2 IN P.P.B.

MAP 5


HGT METERS
1000
1500
2000
HGT METERS
1000
1500
2000
HGT METERS
1000
1500
2000
METERS
1000
1500
2000

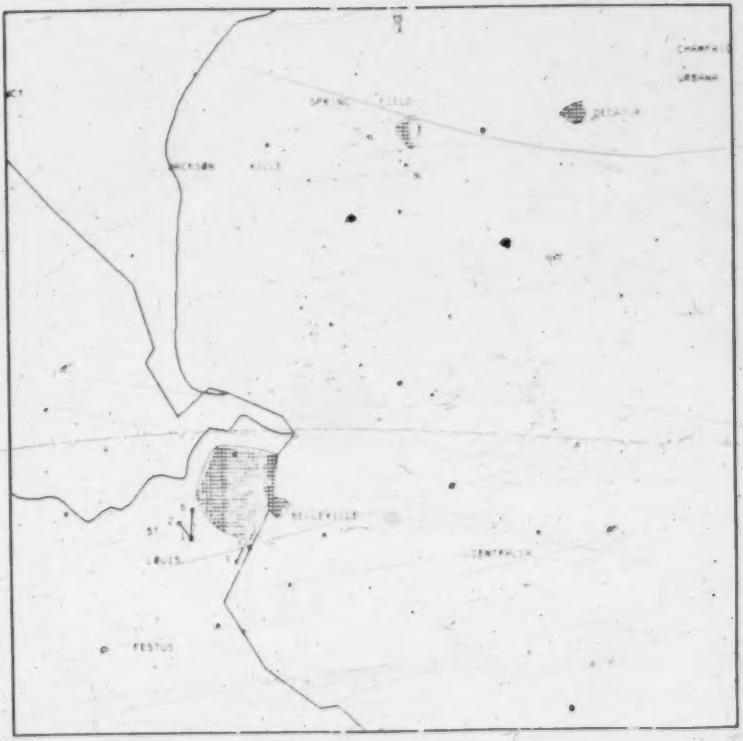


MGT METERS
0 1000 1500 2000
MGT METERS
0 1000 1500 2000
MGT METERS
0 1000 1500 2000
METERS
1000 1500 2000

A 18

61371475

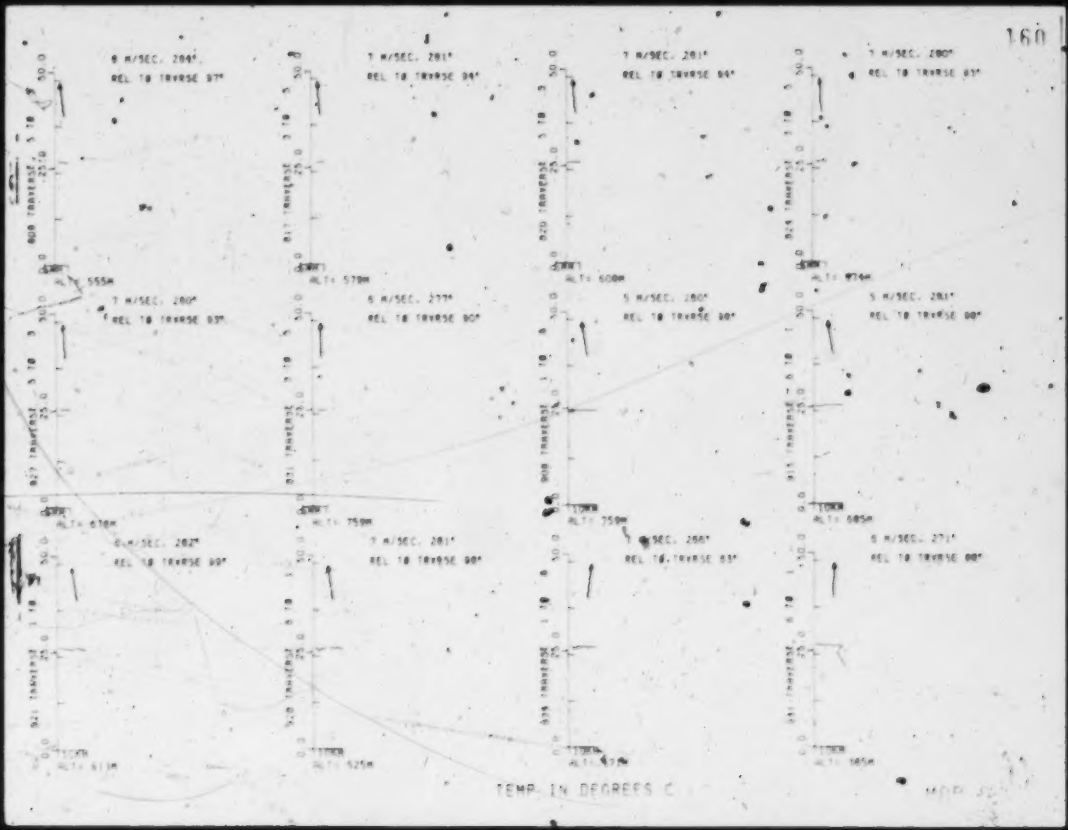
MAP 6



I 18

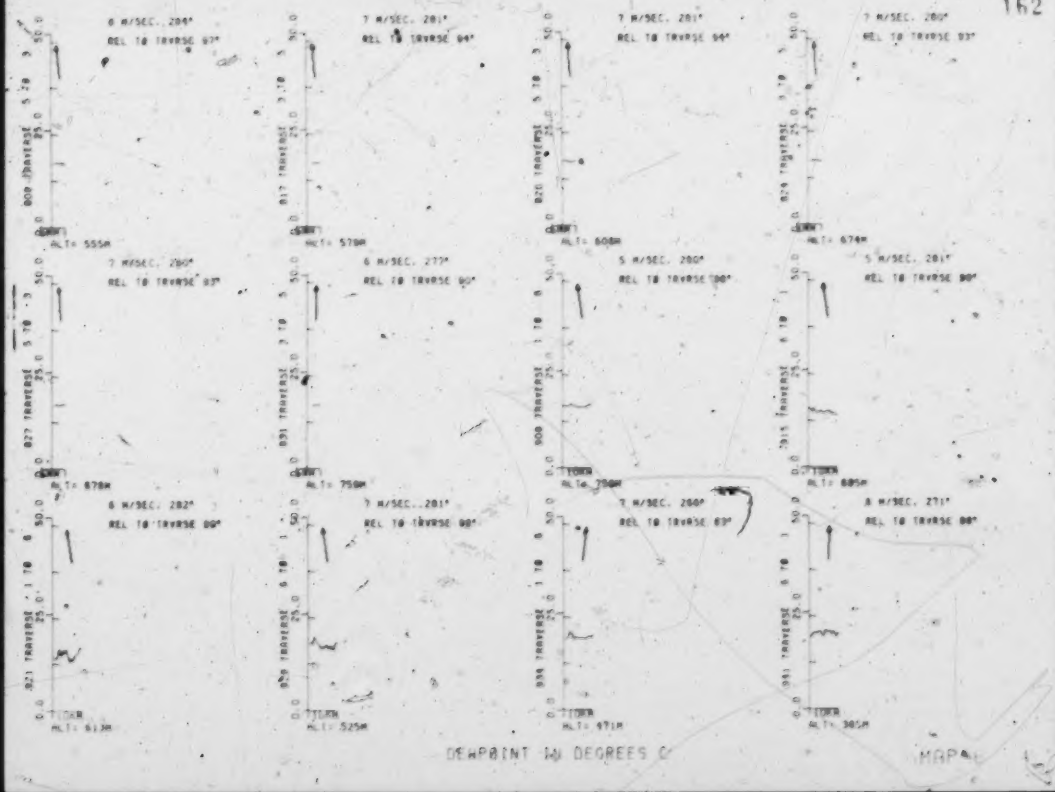
TEMP IN DEGREES C

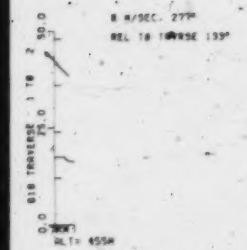
MAP 1

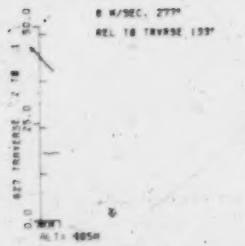

6 M/SEC. 284°
REL TO TRVRSE 97°
555M
7 M/SEC. 281°
REL TO TRVRSE 94°
579M
7 M/SEC. 281°
REL TO TRVRSE 94°
600M
7 M/SEC. 280°
REL TO TRVRSE 93°
974M
7 M/SEC. 280°
REL TO TRVRSE 93°
670M
5 M/SEC. 277°
REL TO TRVRSE 90°
750M
5 M/SEC. 280°
REL TO TRVRSE 90°
750M
5 M/SEC. 281°
REL TO TRVRSE 90°
885M
6 M/SEC. 282°
REL TO TRVRSE 90°
611M
7 M/SEC. 281°
REL TO TRVRSE 90°
525M
SEC. 280°
REL TO TRVRSE 85°
5 M/SEC. 271°
REL TO TRVRSE 80°
685M
TEMP. IN DEGREES C

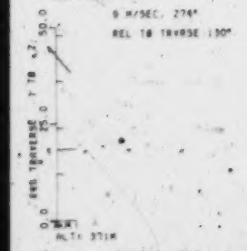
TEMP IN DEGREES C

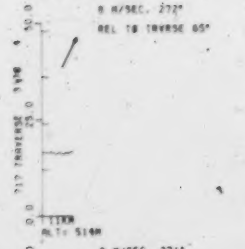
MAP 5

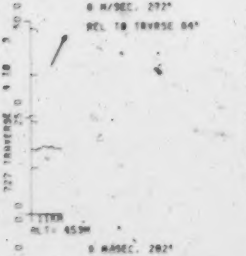

6 M/SEC. 284°
REL TO TRVRSE 97°
ALT= 555M
7 M/SEC. 281°
REL TO TRVRSE 94°
ALT= 570M
7 M/SEC. 281°
REL TO TRVRSE 94°
ALT= 608M
7 M/SEC. 280°
REL TO TRVRSE 93°
ALT= 674M
7 M/SEC. 280°
REL TO TRVRSE 93°
ALT= 678M
6 M/SEC. 277°
REL TO TRVRSE 90°
ALT= 750M
5 M/SEC. 280°
REL TO TRVRSE 90°
ALT= 750M
5 M/SEC. 281°
REL TO TRVRSE 90°
ALT= 685M
6 M/SEC. 282°
REL TO TRVRSE 90°
ALT= 613M
7 M/SEC. 281°
REL TO TRVRSE 90°
ALT= 525M
7 M/SEC. 280°
REL TO TRVRSE 89°
ALT= 471M
8 M/SEC. 271°
REL TO TRVRSE 80°
ALT= 305M
TOWER
DEWPOINT IN DEGREES C

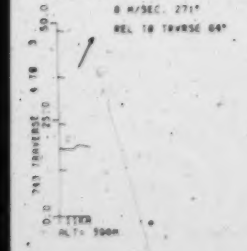


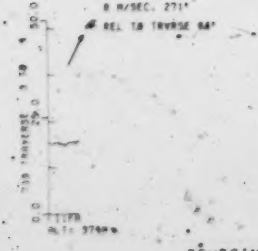


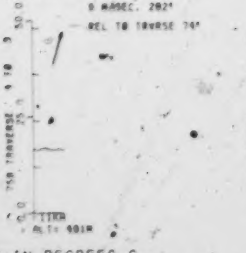


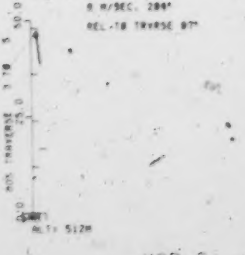










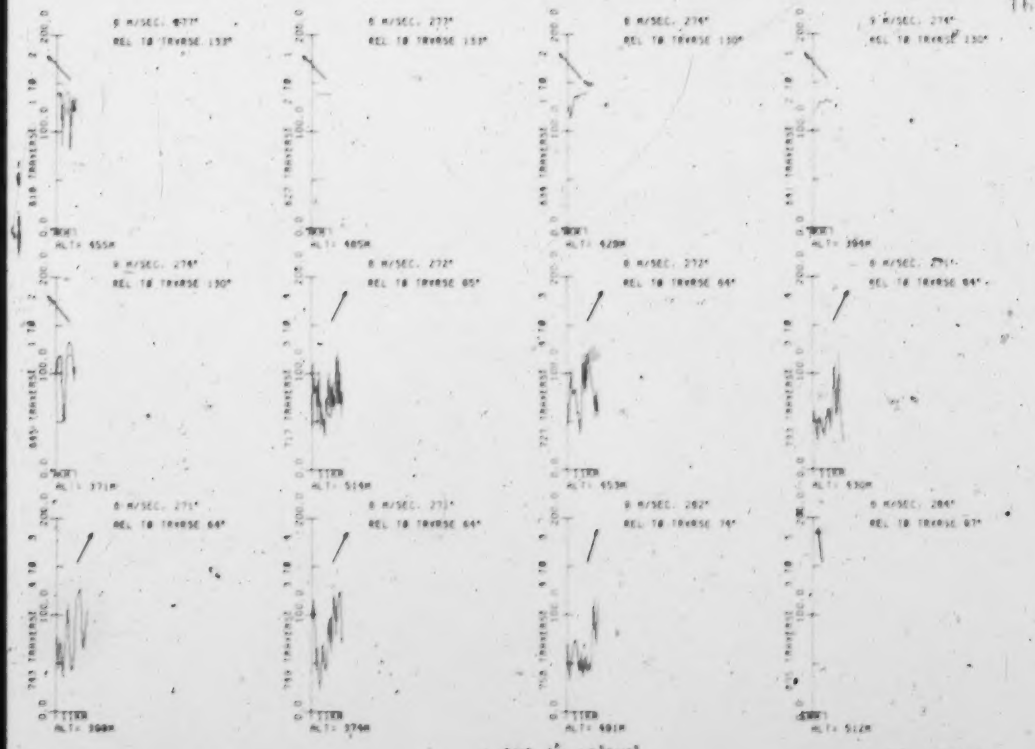


DEWPOINT IN DEGREES C

MAP 6

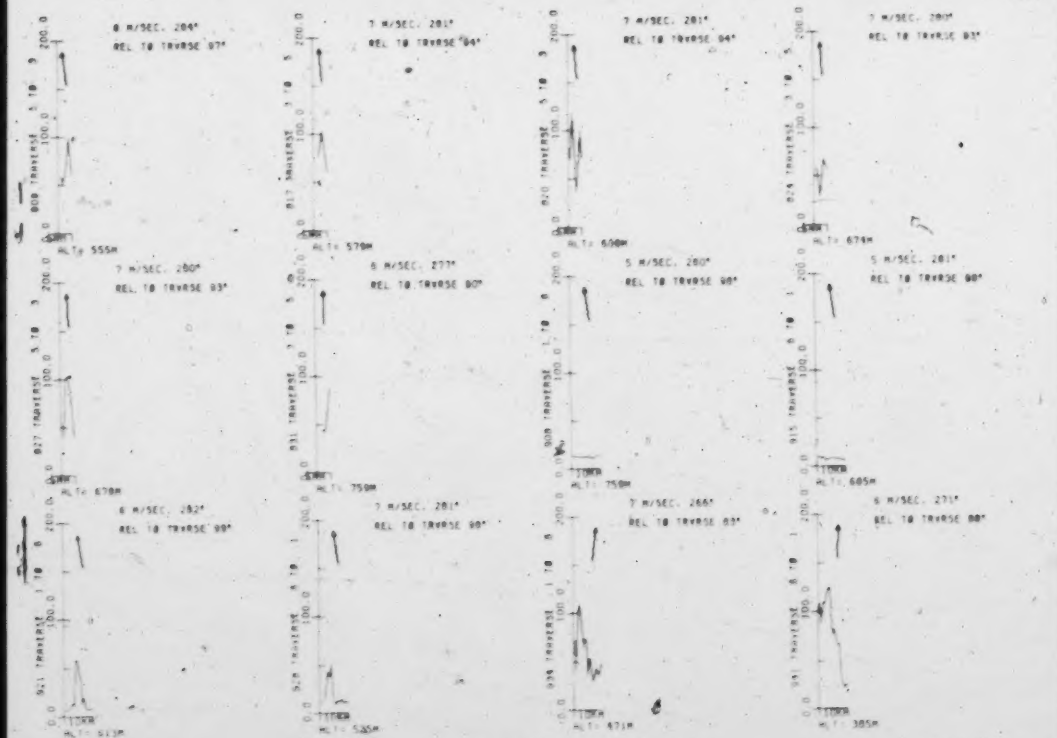
DEWPOINT IN DEGREES C

MAP 5



CNC IN $10^3 CM^{-3}$

MAP 5

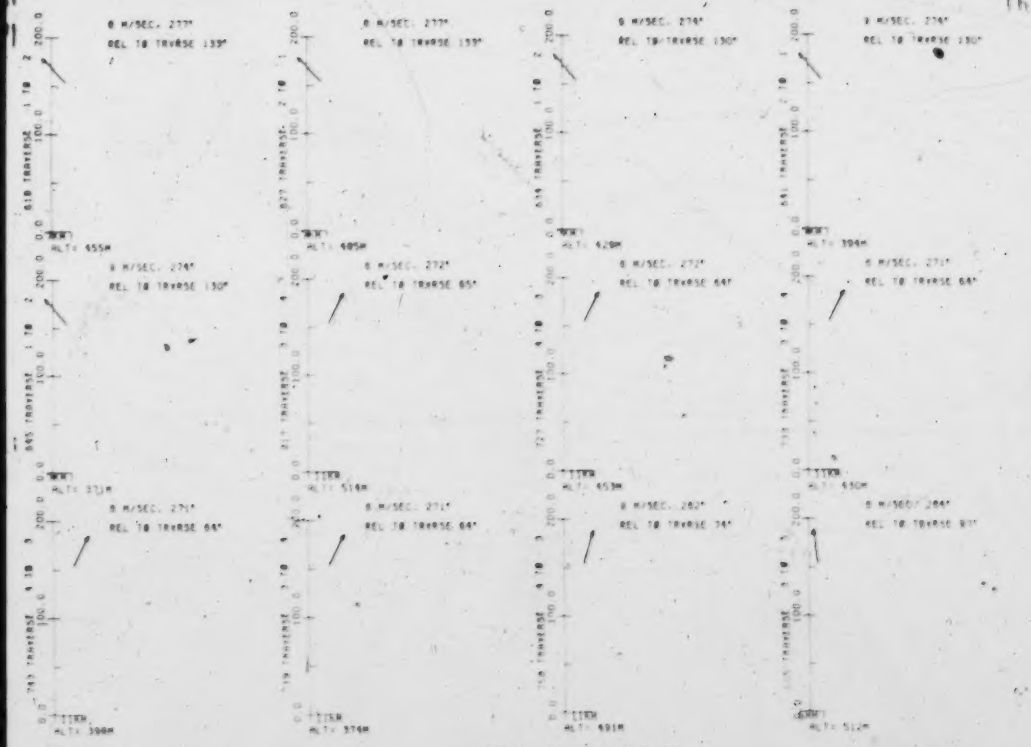


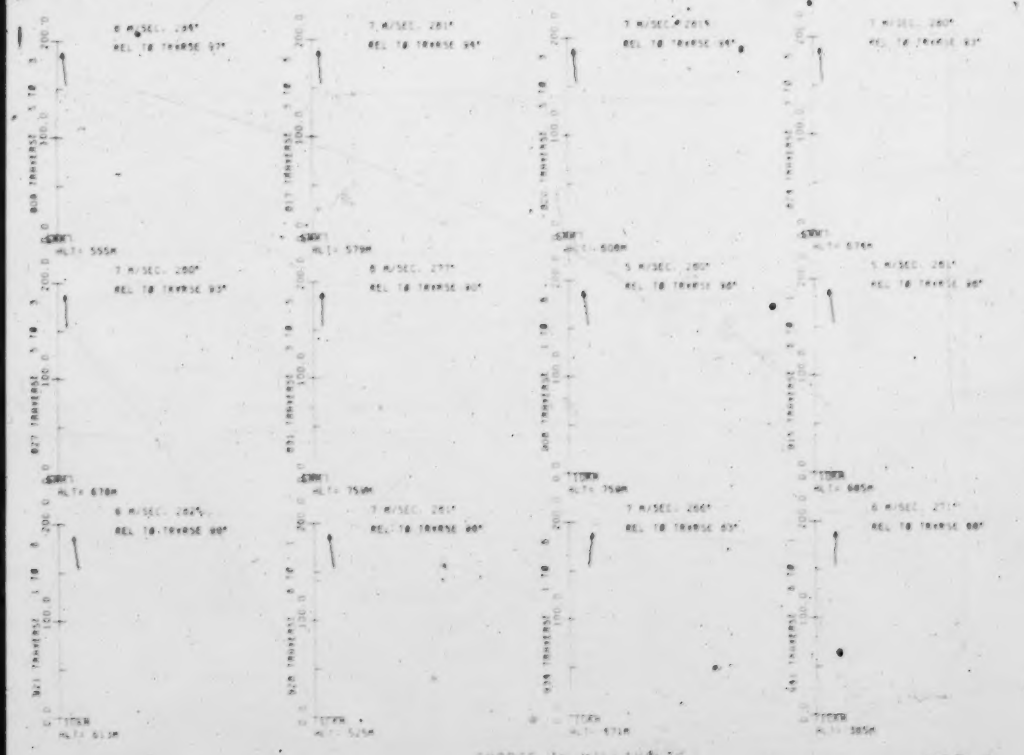
CNC IN $10^3 CM^{-3}$

MSP F

CNC IN $10^5 CM^{-3}$

MAP 6


0 M/SEC. 277°
REL TO TRANSE 139°
ALT= 455M
0 M/SEC. 277°
REL TO TRANSE 139°
ALT= 485M
0 M/SEC. 274°
REL TO TRANSE 130°
ALT= 429M
0 M/SEC. 274°
REL TO TRANSE 130°
ALT= 394M
0 M/SEC. 274°
REL TO TRANSE 130°
ALT= 371M
0 M/SEC. 272°
REL TO TRANSE 65°
ALT= 514M
0 M/SEC. 272°
REL TO TRANSE 64°
ALT= 453M
0 M/SEC. 271°
REL TO TRANSE 64°
ALT= 450M
0 M/SEC. 271°
REL TO TRANSE 64°
ALT= 398M
0 M/SEC. 271°
REL TO TRANSE 64°
ALT= 374M
0 M/SEC. 262°
REL TO TRANSE 74°
ALT= 491M
0 M/SEC. 264°
REL TO TRANSE 97°
ALT= 512M
CHARGE IN MILLIVOLTS
MAP 8


6 M/SEC. 284°
REL TO TRANSE 93°
ALT= 555M
7 M/SEC. 281°
REL TO TRANSE 94°
ALT= 579M
7 M/SEC. 281°
REL TO TRANSE 94°
ALT= 600M
7 M/SEC. 280°
REL TO TRANSE 93°
ALT= 674M
7 M/SEC. 280°
REL TO TRANSE 93°
ALT= 670M
8 M/SEC. 277°
REL TO TRANSE 92°
ALT= 750M
5 M/SEC. 280°
REL TO TRANSE 90°
ALT= 750M
5 M/SEC. 281°
REL TO TRANSE 90°
ALT= 685M
6 M/SEC. 284°
REL TO TRANSE 90°
7 M/SEC. 281°
REL TO TRANSE 90°
7 M/SEC. 280°
REL TO TRANSE 89°
6 M/SEC. 271°
REL TO TRANSE 90°
CHARGE IN MILLIVOLTS

CHARGE IN MILLIVOLTS.

MAP 6

BSCAT IN $10^{-5}M^{-1}$

MAP 6

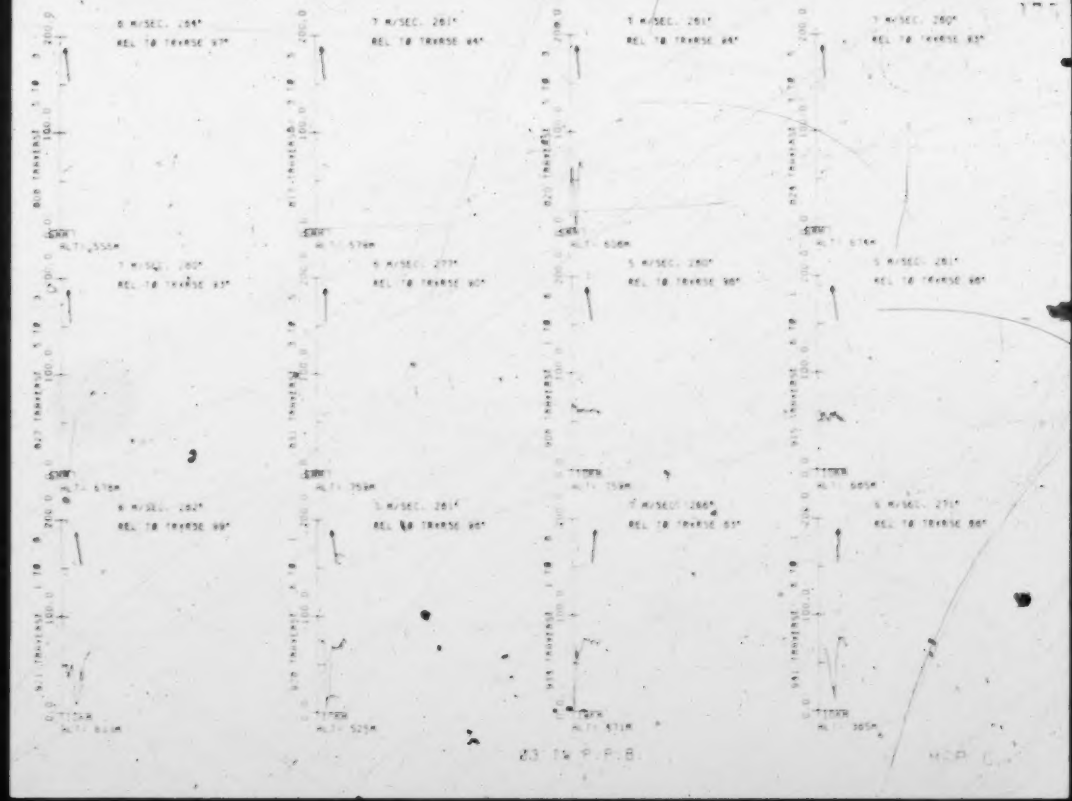
8 M/SEC. 284°
REL TO TRANSE 87°
ALT: 555M
7 M/SEC. 281°
REL TO TRANSE 84°
ALT: 579M
7 M/SEC. 281°
REL TO TRANSE 94°
ALT: 608M
7 M/SEC. 280°
REL TO TRANSE 93°
ALT: 674M
7 M/SEC. 280°
REL TO TRANSE 93°
ALT: 678M
6 M/SEC. 277°
REL TO TRANSE 90°
ALT: 750M
6 M/SEC. 281°
REL TO TRANSE 90°
ALT: 750M
6 M/SEC. 281°
REL TO TRANSE 90°
ALT: 685M
6 M/SEC. 282°
REL TO TRANSE 89°
7 M/SEC. 281°
REL TO TRANSE 90°
7 M/SEC. 256°
REL TO TRANSE 91°
6 M/SEC. 271°
REL TO TRANSE 88°

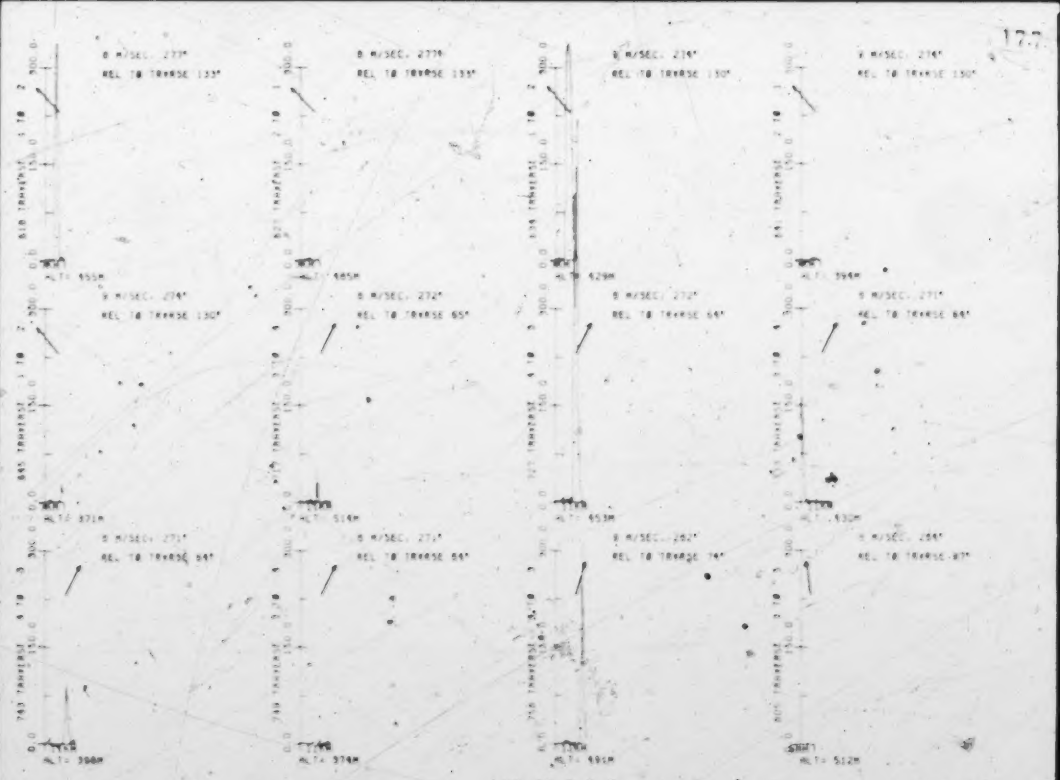
BSCAT IN $10^{-5}M^{-1}$

MAP 5

23 IN P.P.B.

MAP 6


6 M/SEC. 254°
REL TO TRANSE 97°
7 M/SEC. 261°
REL TO TRANSE 94°
7 M/SEC. 261°
REL TO TRANSE 99°
7 M/SEC. 260°
REL TO TRANSE 93°
7 M/SEC. 260°
REL TO TRANSE 93°
5 M/SEC. 277°
REL TO TRANSE 90°
5 M/SEC. 260°
REL TO TRANSE 90°
5 M/SEC. 261°
REL TO TRANSE 90°
6 M/SEC. 262°
REL TO TRANSE 99°
5 M/SEC. 261°
REL TO TRANSE 90°
7 M/SEC. 260°
REL TO TRANSE 91°
5 M/SEC. 271°
REL TO TRANSE 86°



NB IN P.P.B.

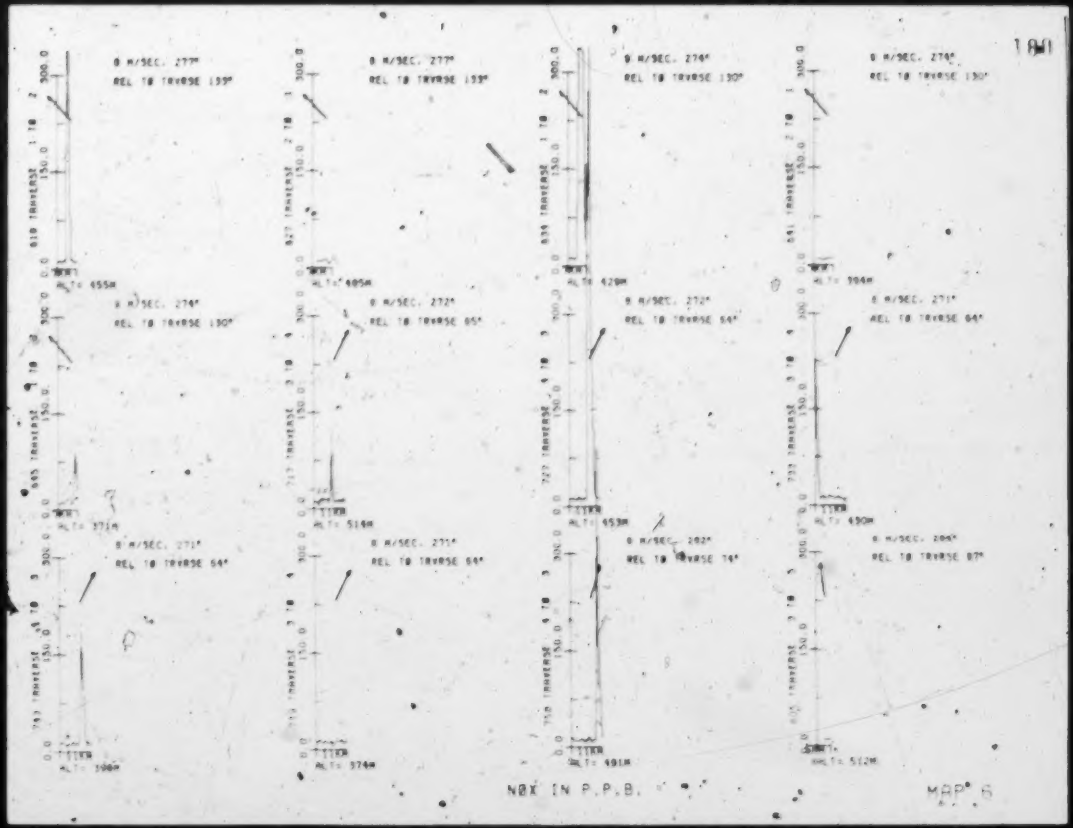
MAP C

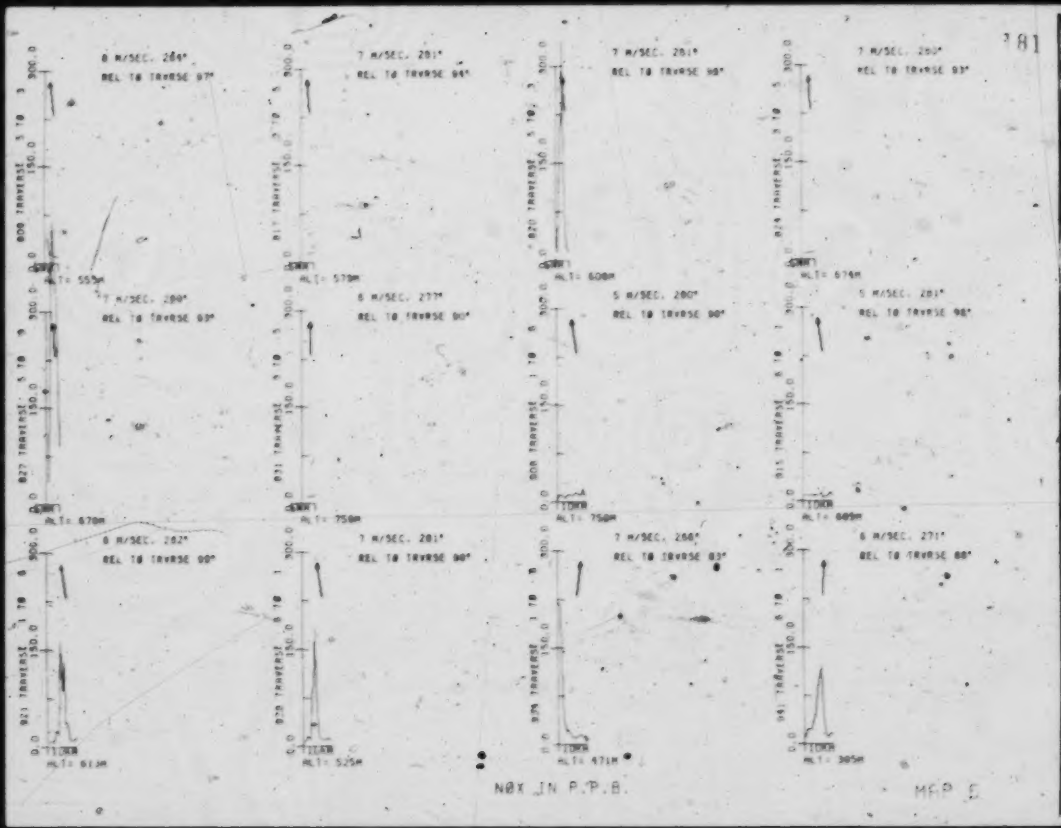
8 M/SEC. 284°
REL TO TRVRSE 97°
7 M/SEC. 281°
REL TO TRVRSE 94°
7 M/SEC. 281°
REL TO TRVRSE 94°
7 M/SEC. 280°
REL TO TRVRSE 93°
7 M/SEC. 280°
REL TO TRVRSE 93°
6 M/SEC. 277°
REL TO TRVRSE 90°
5 M/SEC. 280°
REL TO TRVRSE 98°
5 M/SEC. 281°
REL TO TRVRSE 98°
6 M/SEC. 282°
REL TO TRVRSE 99°
7 M/SEC. 281°
REL TO TRVRSE 98°
7 M/SEC. 266°
REL TO TRVRSE 83°
6 M/SEC. 271°
REL TO TRVRSE 88°

NO (1) P.P.B.

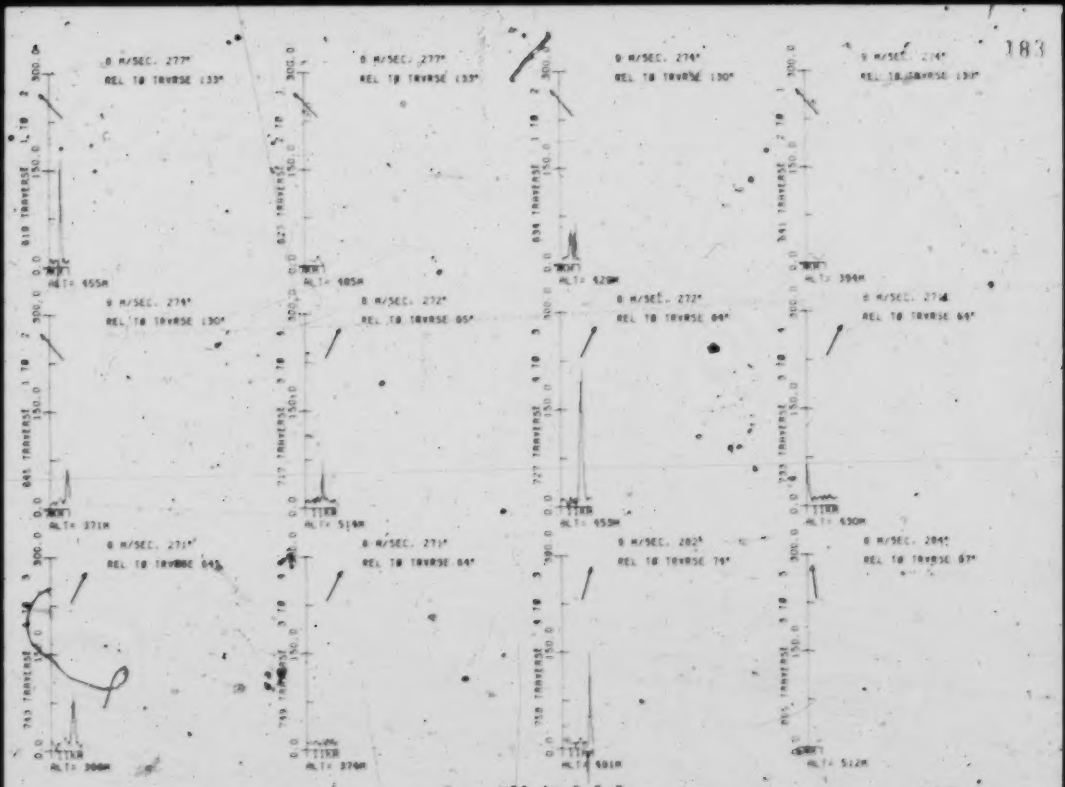
NO IN P.P.B.

MAP 5


0 M/SEC. 277°
REL TO TRVRSE 139°
ALT: 655M
0 M/SEC. 277°
REL TO TRVRSE 139°
ALT: 605M
0 M/SEC. 274°
REL TO TRVRSE 130°
ALT: 429M
0 M/SEC. 274°
REL TO TRVRSE 130°
ALT: 304M
0 M/SEC. 274°
REL TO TRVRSE 130°
ALT: 371M
0 M/SEC. 272°
REL TO TRVRSE 65°
ALT: 519M
0 M/SEC. 272°
REL TO TRVRSE 64°
ALT: 453M
0 M/SEC. 271°
REL TO TRVRSE 64°
ALT: 450M
0 M/SEC. 271°
REL TO TRVRSE 64°
ALT: 590M
0 M/SEC. 271°
REL TO TRVRSE 64°
ALT: 574M
0 M/SEC. 282°
REL TO TRVRSE 74°
ALT: 491M
0 M/SEC. 286°
REL TO TRVRSE 87°
ALT: 512M
NOX IN P.P.B.
MAP 5


8 M/SEC. 284°
REL TØ TRVRSE 97°
ALT= 555M
7 M/SEC. 281°
REL TØ TRVRSE 94°
ALT= 579M
7 M/SEC. 281°
REL TØ TRVRSE 90°
ALT= 600M
7 M/SEC. 280°
REL TØ TRVRSE 93°
ALT= 674M
7 M/SEC. 280°
REL TØ TRVRSE 93°
ALT= 670M
6 M/SEC. 277°
REL TØ TRVRSE 90°
ALT= 750M
5 M/SEC. 280°
REL TØ TRVRSE 90°
ALT= 750M
5 M/SEC. 281°
REL TØ TRVRSE 98°
ALT= 609M
6 M/SEC. 282°
REL TØ TRVRSE 90°
ALT= 613M
7 M/SEC. 281°
REL TØ TRVRSE 90°
ALT= 525M
7 M/SEC. 266°
REL TØ TRVRSE 83°
ALT= 471M
6 M/SEC. 271°
REL TØ TRVRSE 88°
ALT= 305M
NØX IN P.P.B.
MAP 5

NOX IN P.P.B.
MAP 6



NØ2 IN P.P.B.

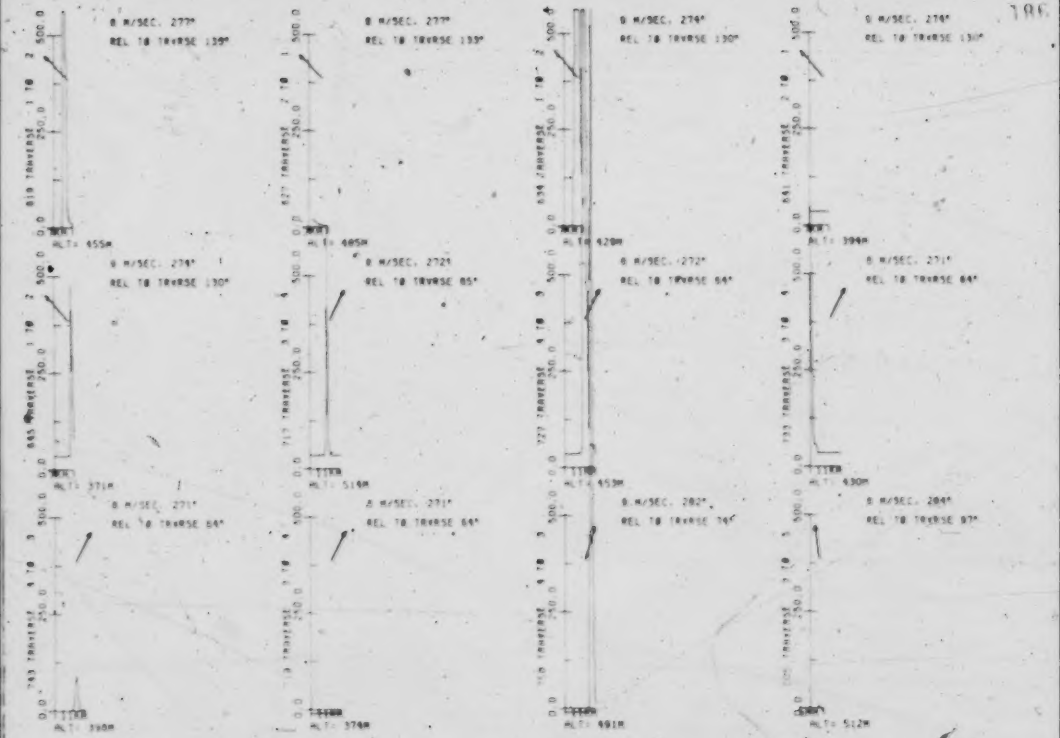
MAP 6.

N02 IN P.P.B.

MAP 5

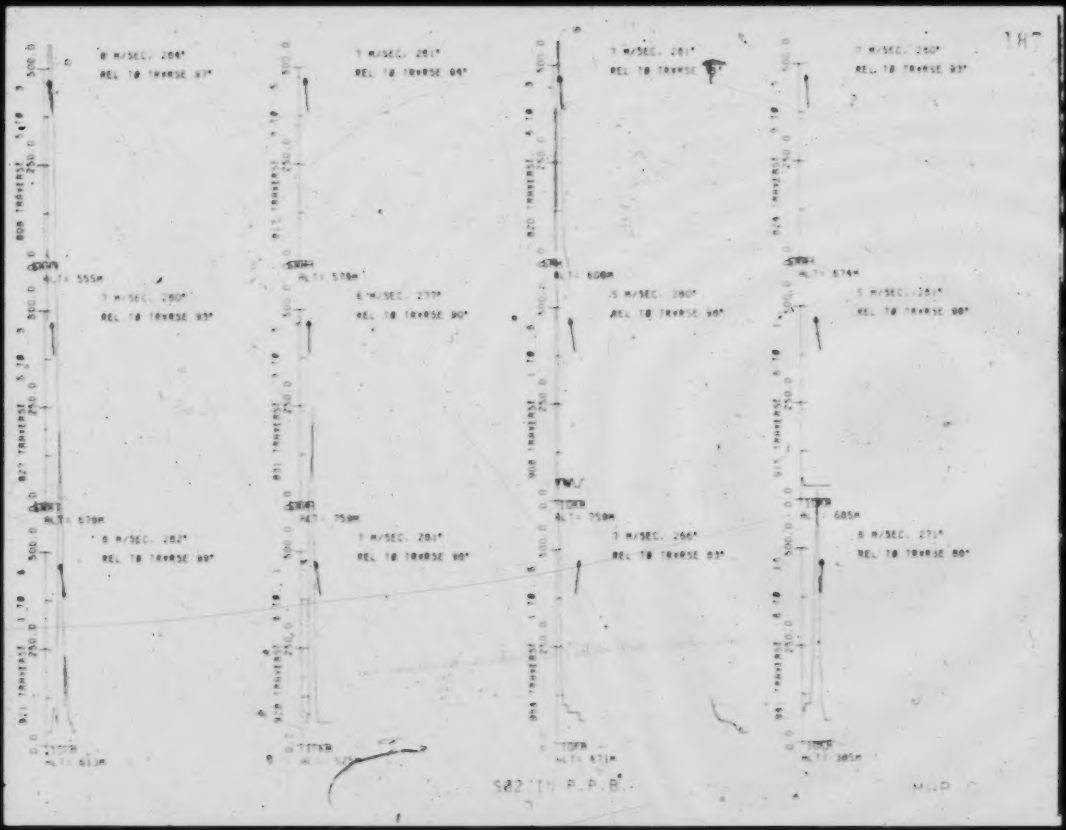
N02 IN P.P.B.

MAP 6



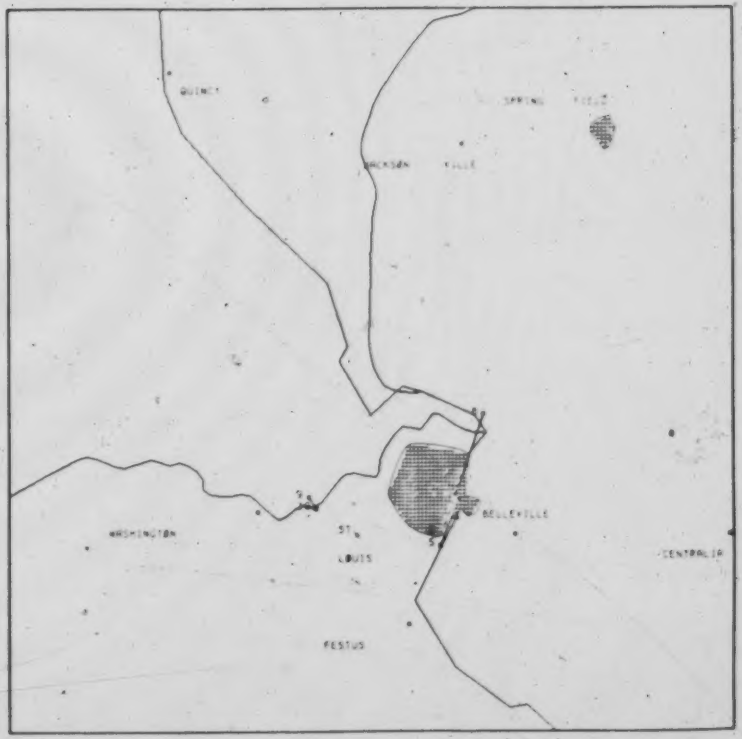
S82 IN P.P.B.

MAP 5.1

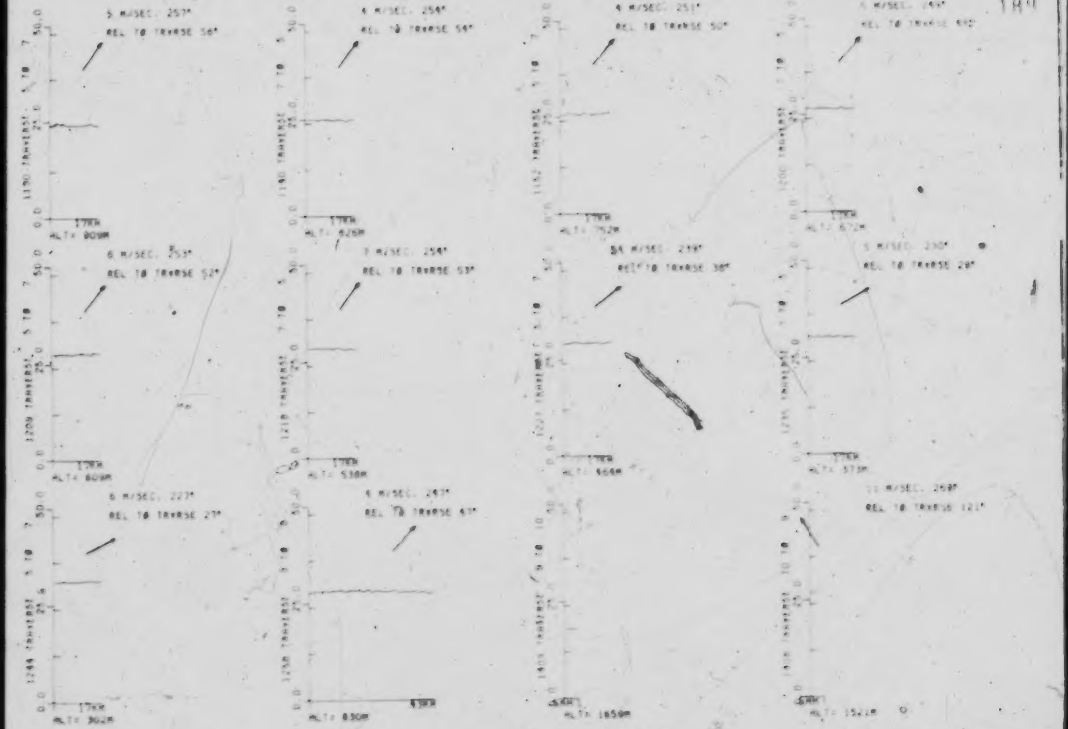

8 M/SEC. 284°
REL TO TRANSE 93°
ALT: 555M
7 M/SEC. 280°
REL TO TRANSE 93°
ALT: 679M
6 M/SEC. 282°
REL TO TRANSE 90°
ALT: 613M
7 M/SEC. 281°
REL TO TRANSE 94°
ALT: 578M
6 M/SEC. 277°
REL TO TRANSE 90°
ALT: 758M
7 M/SEC. 281°
REL TO TRANSE 90°
7 M/SEC. 281°
REL TO TRANSE 87°
ALT: 600M
5 M/SEC. 280°
REL TO TRANSE 90°
ALT: 759M
7 M/SEC. 286°
REL TO TRANSE 83°
ALT: 671M
7 M/SEC. 280°
REL TO TRANSE 93°
ALT: 674M
5 M/SEC. 281°
REL TO TRANSE 90°
ALT: 685M
6 M/SEC. 271°
REL TO TRANSE 80°
ALT: 385M

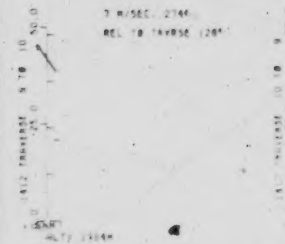
01471476

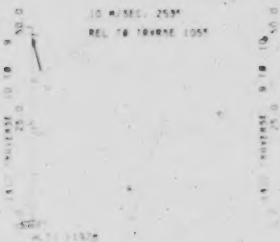
MAP 7



K0A

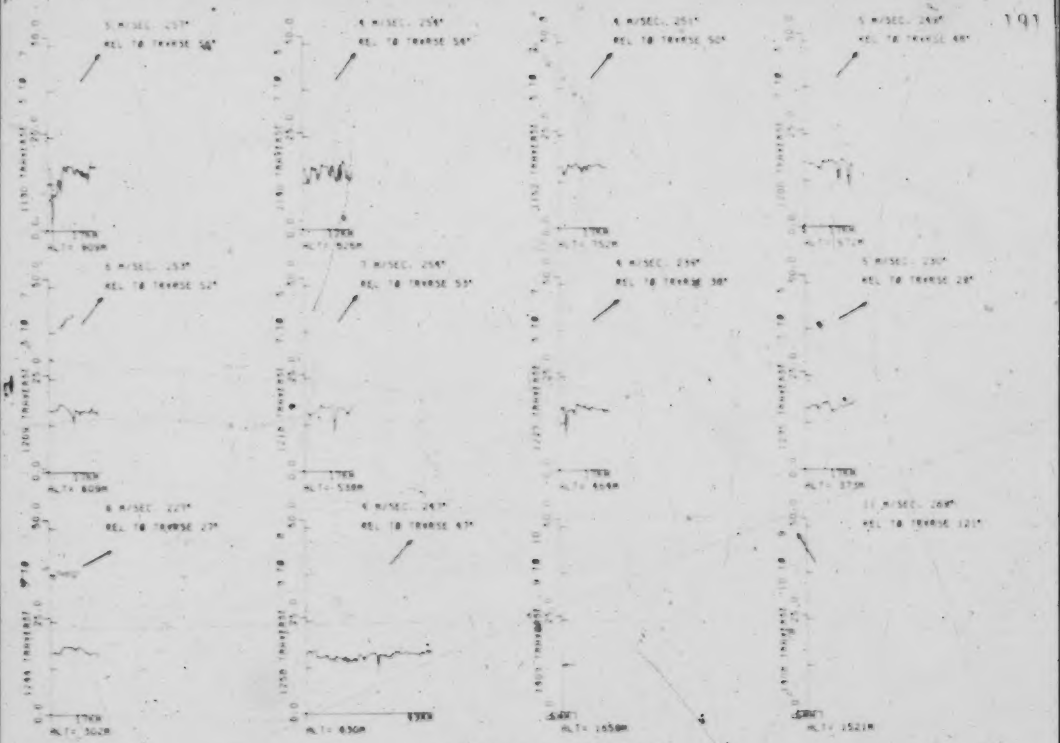

5 M/SEC. 257°
REL TO TRANSE 56°
ALT: 909M
4 M/SEC. 254°
REL TO TRANSE 54°
ALT: 925M
4 M/SEC. 251°
REL TO TRANSE 50°
ALT: 752M
5 M/SEC. 244°
REL TO TRANSE 43°
ALT: 672M
6 M/SEC. 253°
REL TO TRANSE 52°
ALT: 809M
7 M/SEC. 254°
REL TO TRANSE 53°
ALT: 538M
ALT: 664M
5 M/SEC. 230°
REL TO TRANSE 28°
ALT: 575M
6 M/SEC. 227°
REL TO TRANSE 27°
ALT: 304M
4 M/SEC. 247°
REL TO TRANSE 47°
ALT: 830M
ALT: 1650M
11 M/SEC. 258°
REL TO TRANSE 121°
ALT: 1542M
TEMP IN DEGREES C
MAP 7





TEMP IN DEGREES C

MAP 7

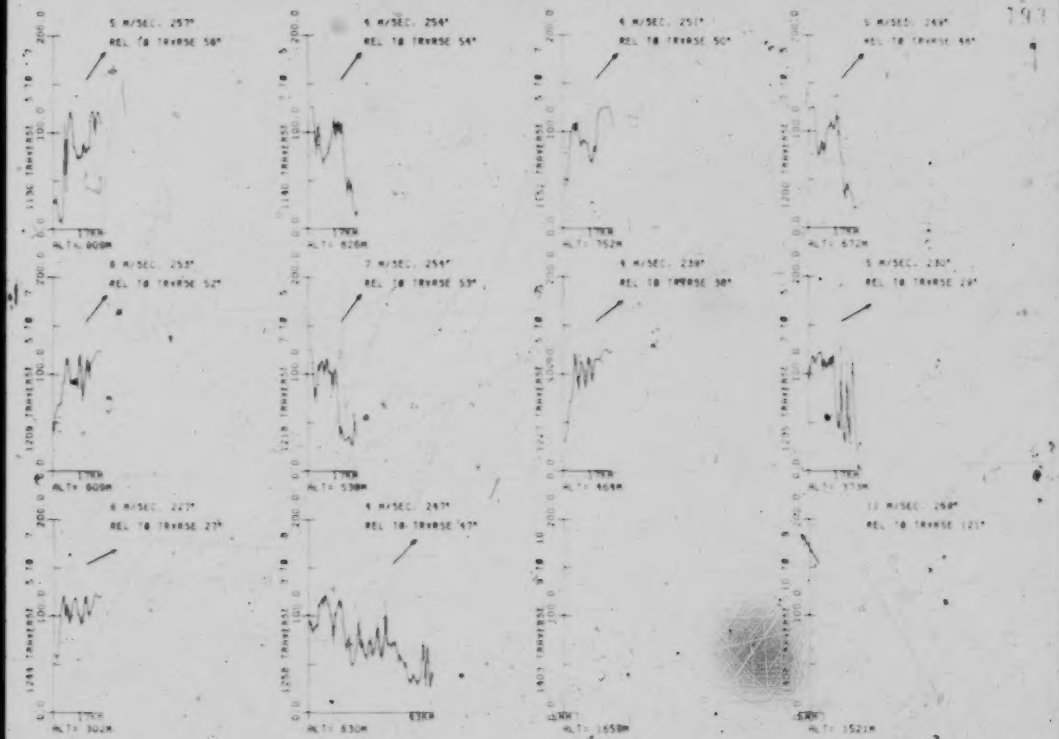


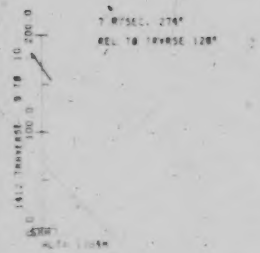
DEWPOINT IN DEGREES C

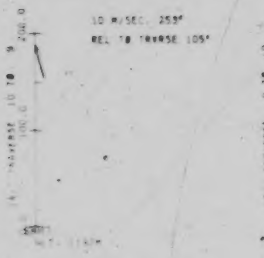
MAP 7

DEWPOINT IN DEGREES C

MAP 7

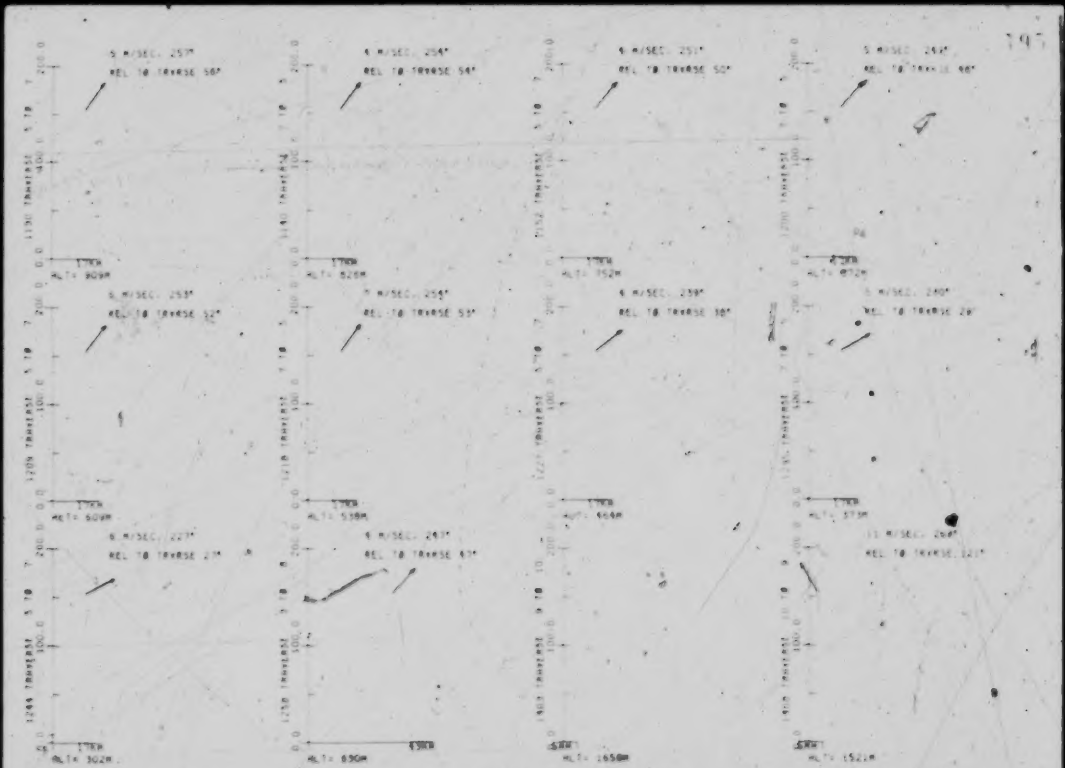

5 M/SEC. 257°
REL TO TRVRSE 56°
6 M/SEC. 254°
REL TO TRVRSE 54°
6 M/SEC. 251°
REL TO TRVRSE 50°
5 M/SEC. 249°
REL TO TRVRSE 48°
8 M/SEC. 253°
REL TO TRVRSE 52°
7 M/SEC. 254°
REL TO TRVRSE 53°
6 M/SEC. 238°
REL TO TRVRSE 38°
5 M/SEC. 230°
REL TO TRVRSE 29°
6 M/SEC. 227°
REL TO TRVRSE 27°
9 M/SEC. 247°
REL TO TRVRSE 47°
11 M/SEC. 250°
REL TO TRVRSE 121°
CNC IN $10^3 CM^{-3}$
MAP 7



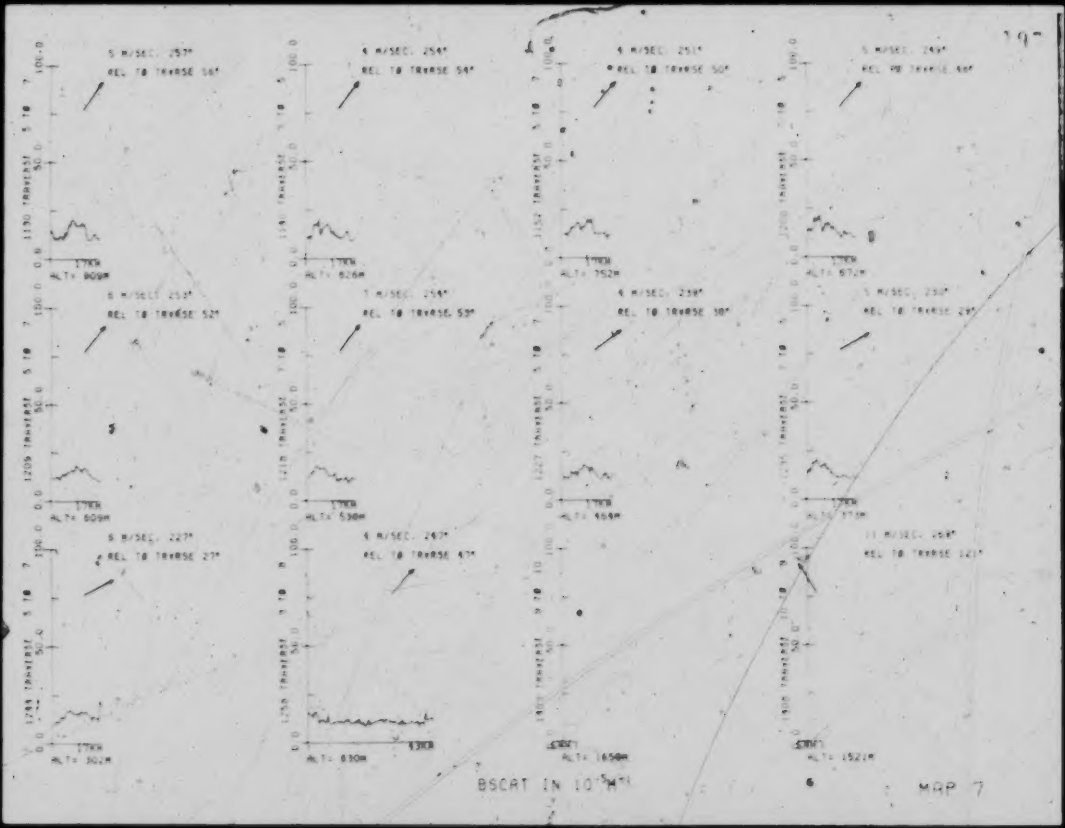


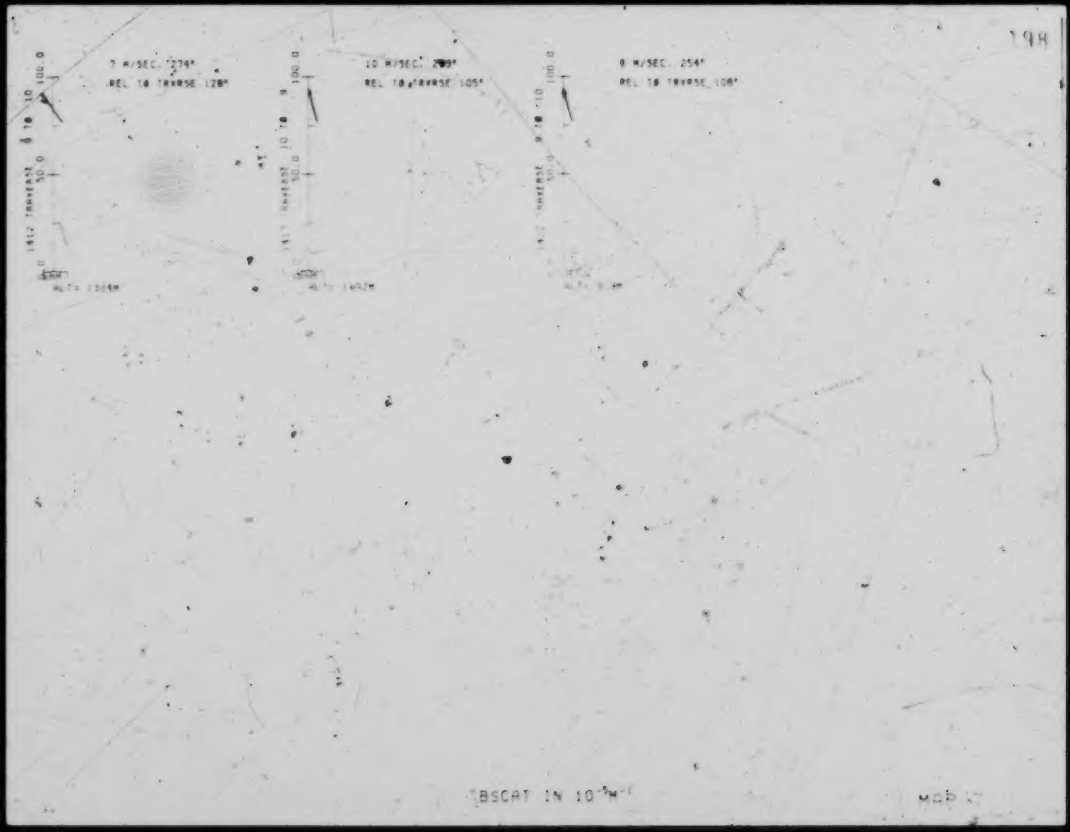
CNC IN 10^3CM^3

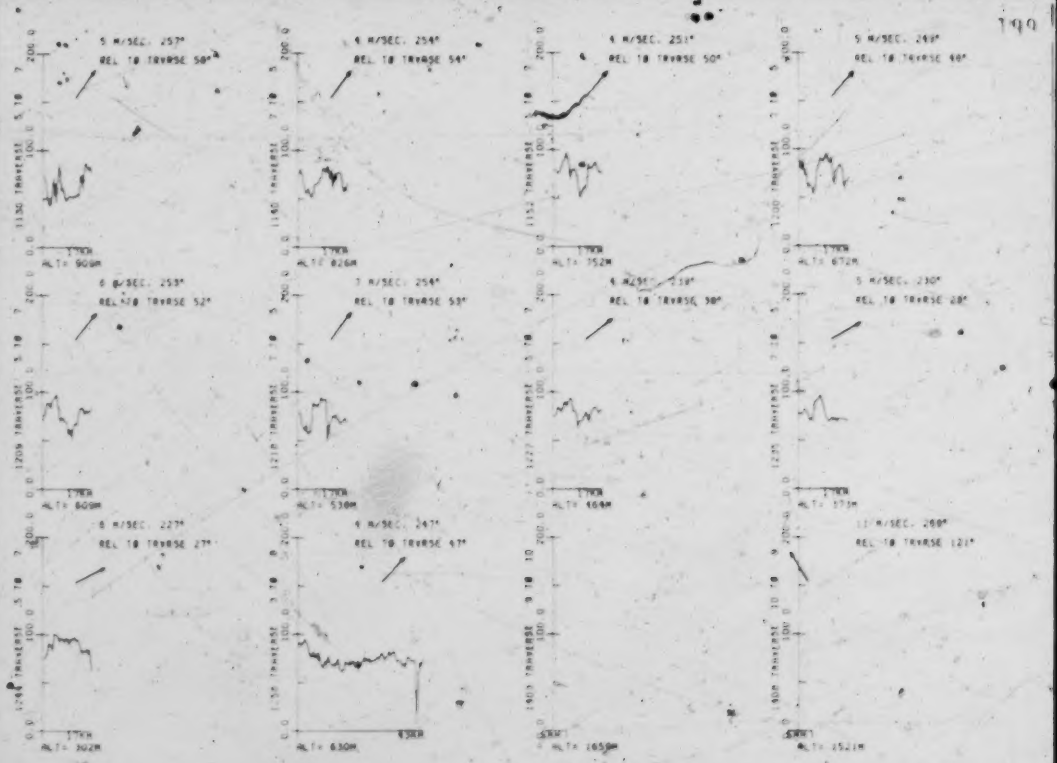
MAP 7


CHARGE IN MILLIVOLTS
MAP 7

CHARGE IN MILLIVOLTS

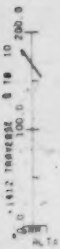

5 M/SEC. 257°
REL TO TRVRSE 56°
ALT= 809M
4 M/SEC. 254°
REL TO TRVRSE 54°
ALT= 626M
4 M/SEC. 251°
REL TO TRVRSE 50°
ALT= 752M
5 M/SEC. 249°
REL TO TRVRSE 46°
ALT= 672M
6 M/SEC. 253°
REL TO TRVRSE 52°
ALT= 609M
7 M/SEC. 254°
REL TO TRVRSE 53°
ALT= 530M
4 M/SEC. 239°
REL TO TRVRSE 38°
ALT= 464M
5 M/SEC. 230°
REL TO TRVRSE 29°
ALT= 373M
6 M/SEC. 227°
REL TO TRVRSE 27°
ALT= 302M
4 M/SEC. 247°
REL TO TRVRSE 47°
ALT= 830M
43KM
ALT= 1650M
11 M/SEC. 269°
REL TO TRVRSE 121°
ALT= 1521M
BSCAT IN 10^-5 M^-1
MAP 7

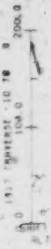

7 M/SEC. 274°
REL TO TRANSE 120°
10 M/SEC. 279°
REL TO TRANSE 105°
8 M/SEC. 254°
REL TO TRANSE 100°
BSCAT IN 10⁻⁶M⁻¹

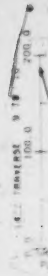


83 IN P.P.B.

MAP 7

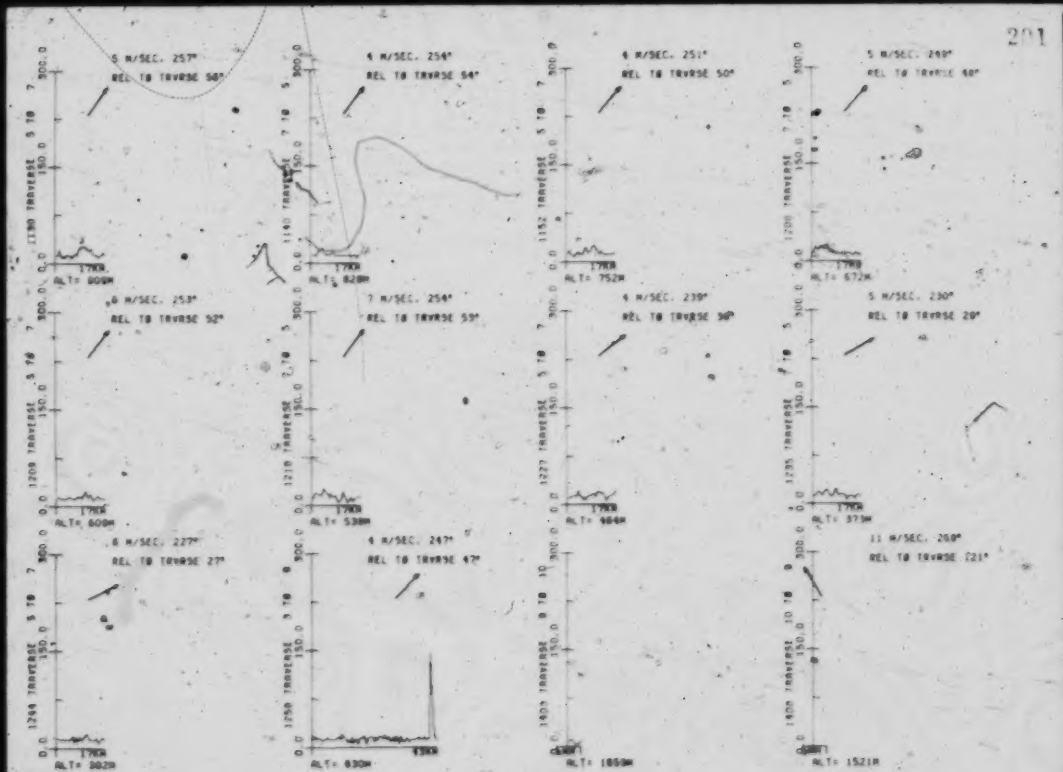






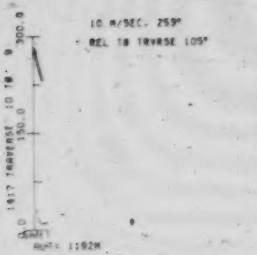
23 IN P.P.B.

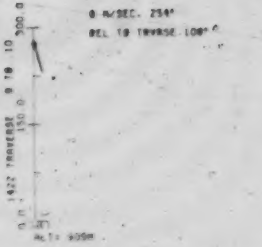
MAP 7



NØ IN P.P.B.

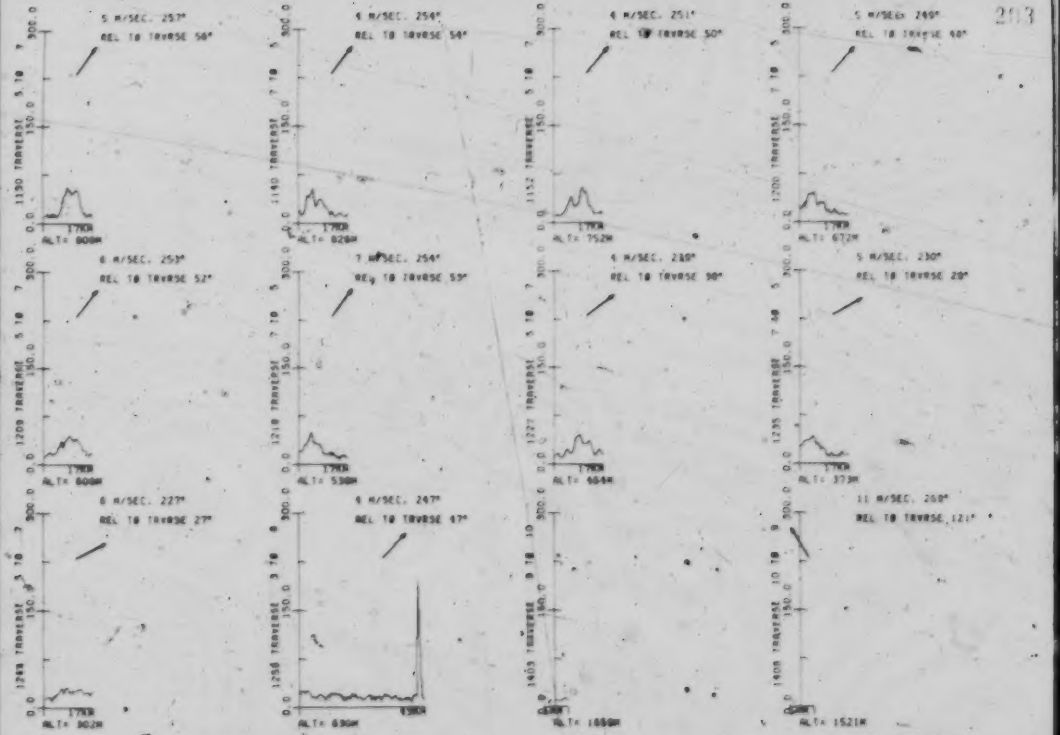
MAP 7





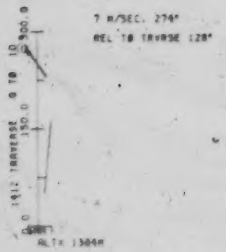
NO IN P.P.B.

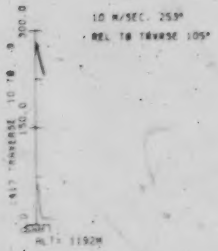
MAP 7

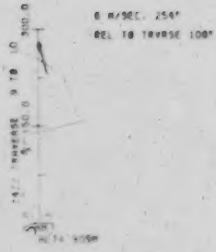


NØX IN P.P.B.

MAP 7

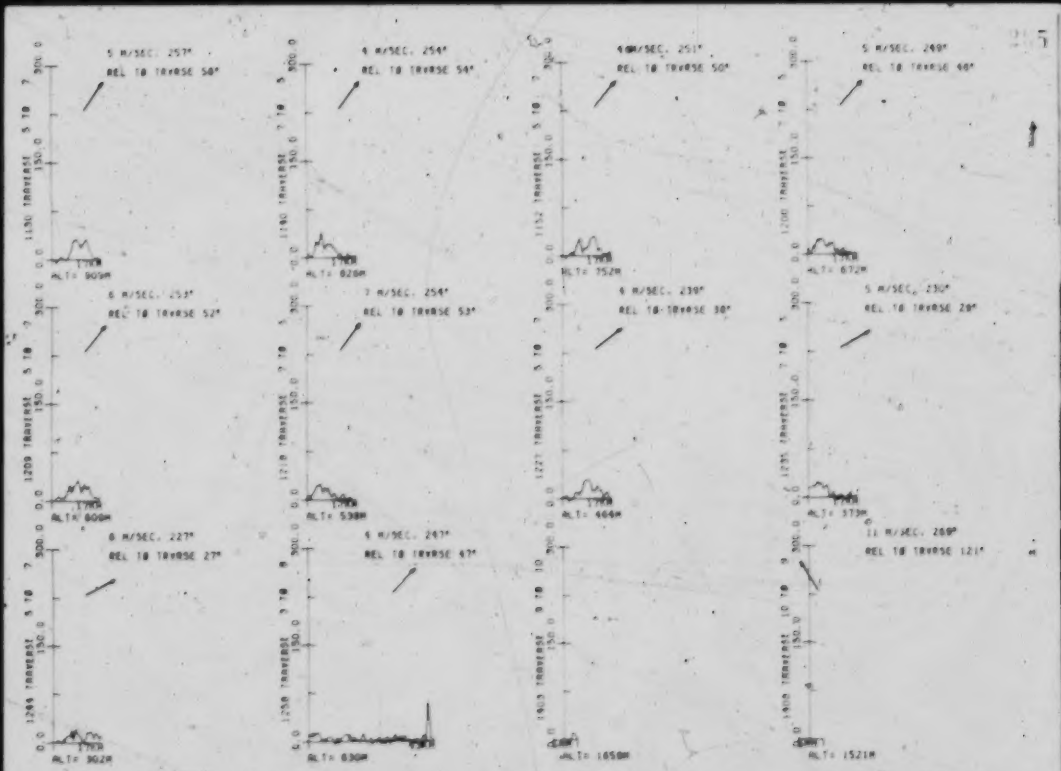






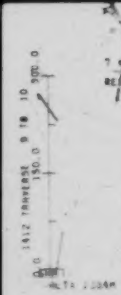
NOX IN P.P.B.

MAP 7



NØ2 IN P.P.B.

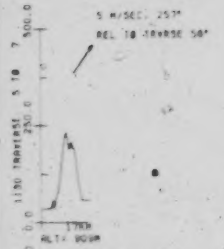
MAP 7

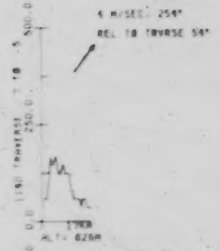


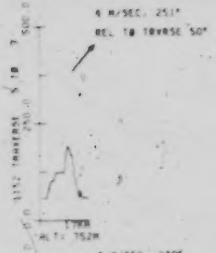
7 M/SEC. 274°
REL TO TRVRSE 120°

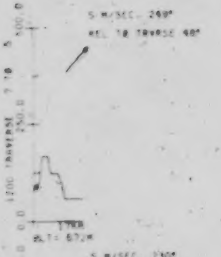
10 M/SEC. 253°
REL TO TRVRSE 105°

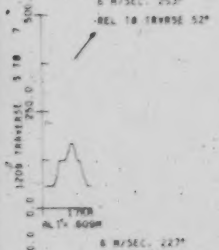
8 M/SEC. 254°
REL TO TRVRSE 108°

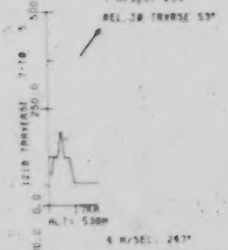


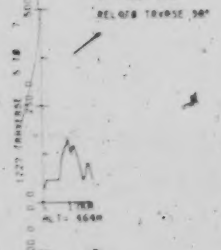


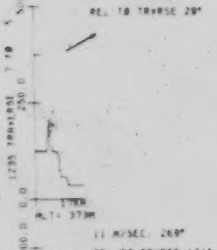


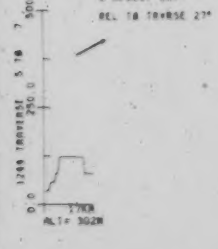


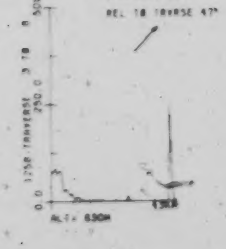


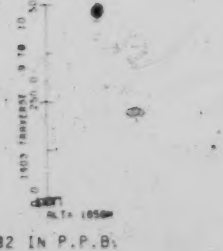


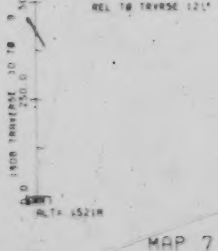






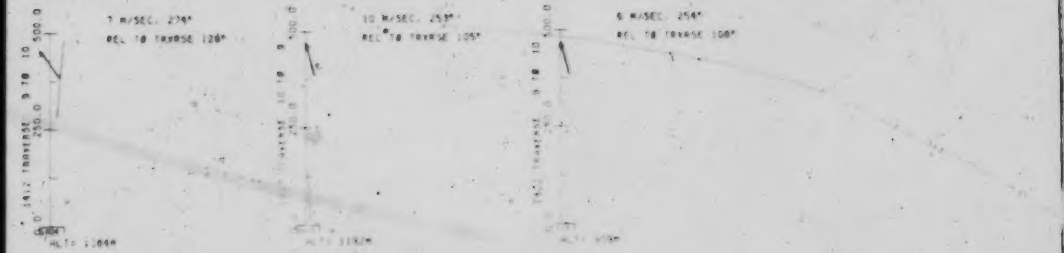




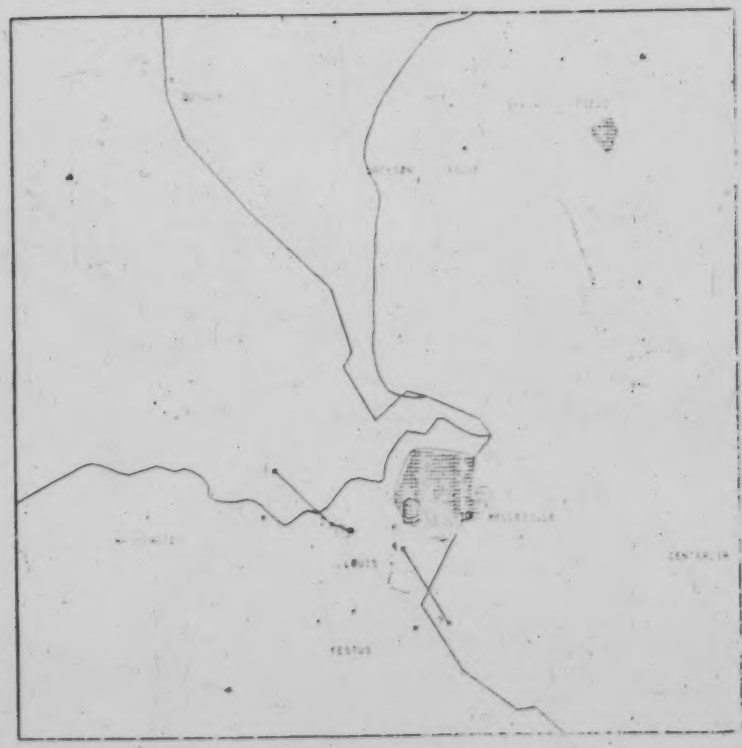


SB2 IN P.P.B.

MAP 7


7 M/SEC. 274°
REL TO TRANSE 126°
10 M/SEC. 253°
REL TO TRANSE 105°
6 M/SEC. 254°
REL TO TRANSE 106°

582 IN P.P.B.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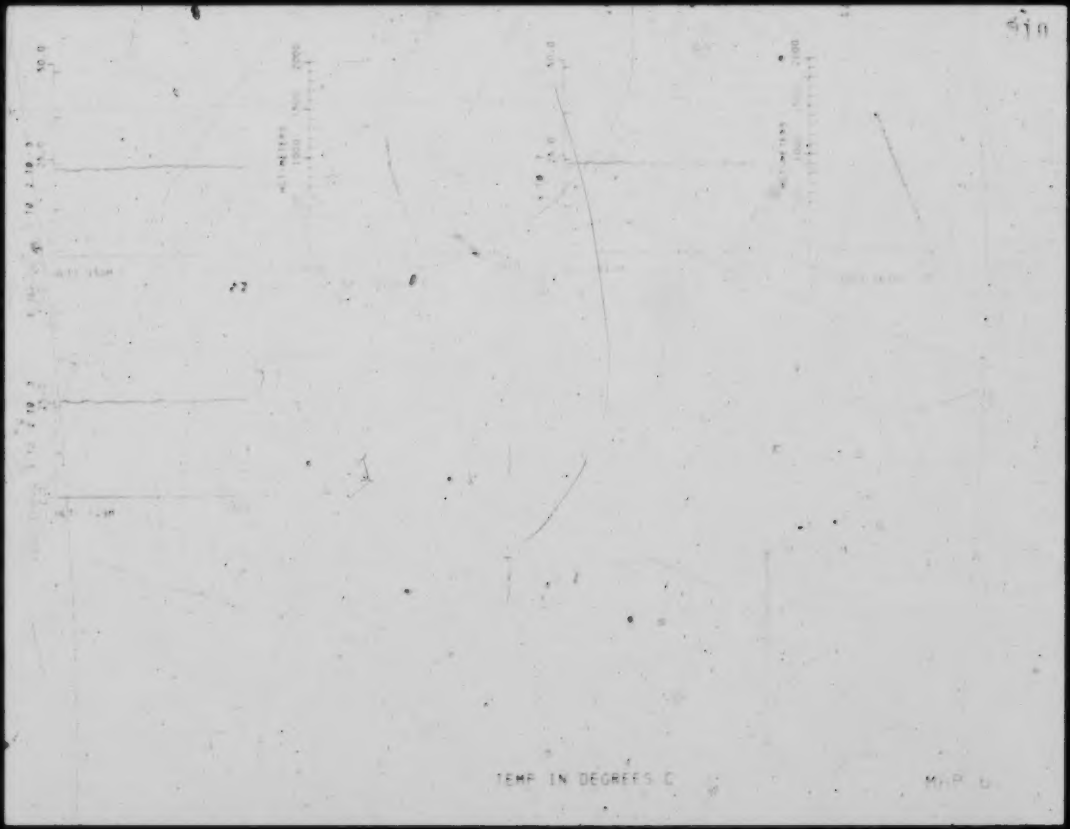
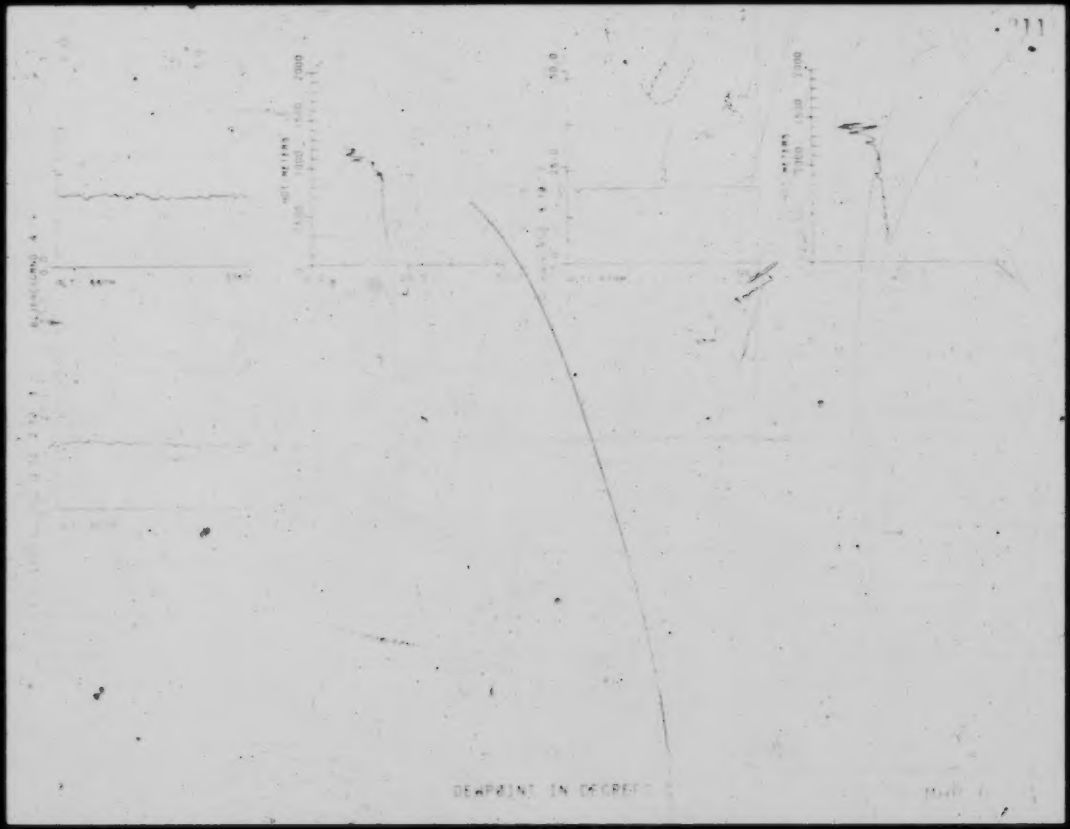
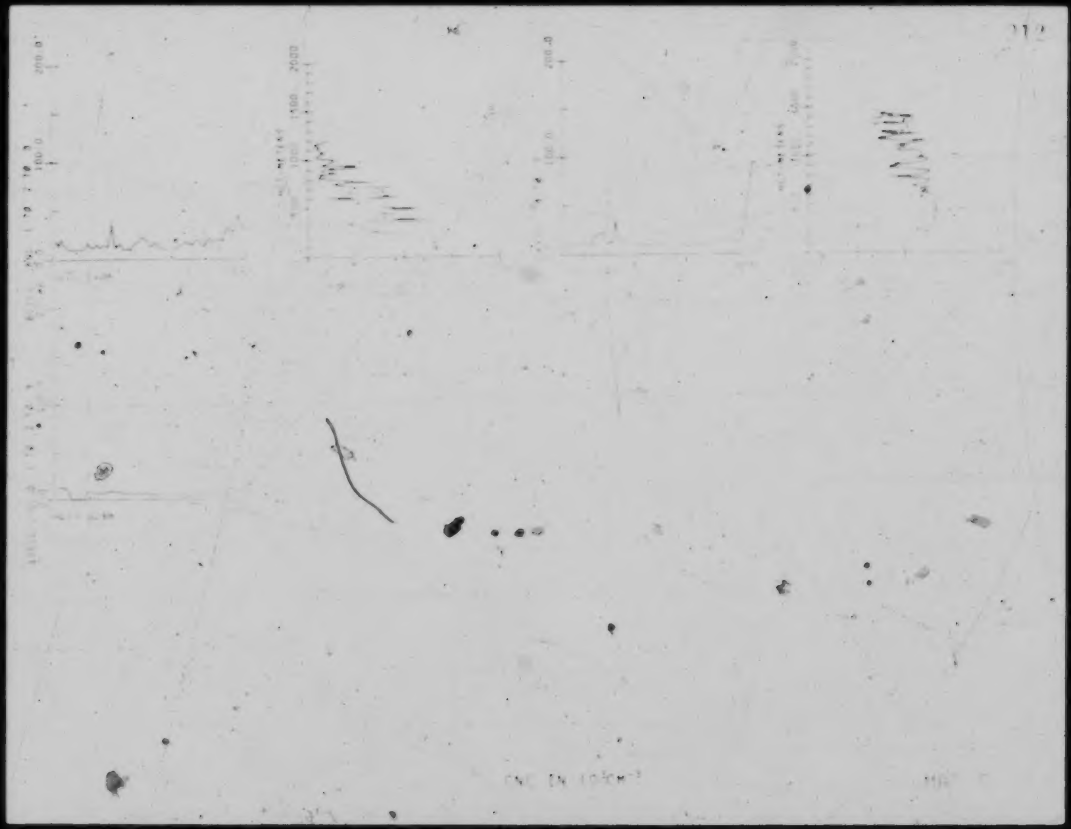
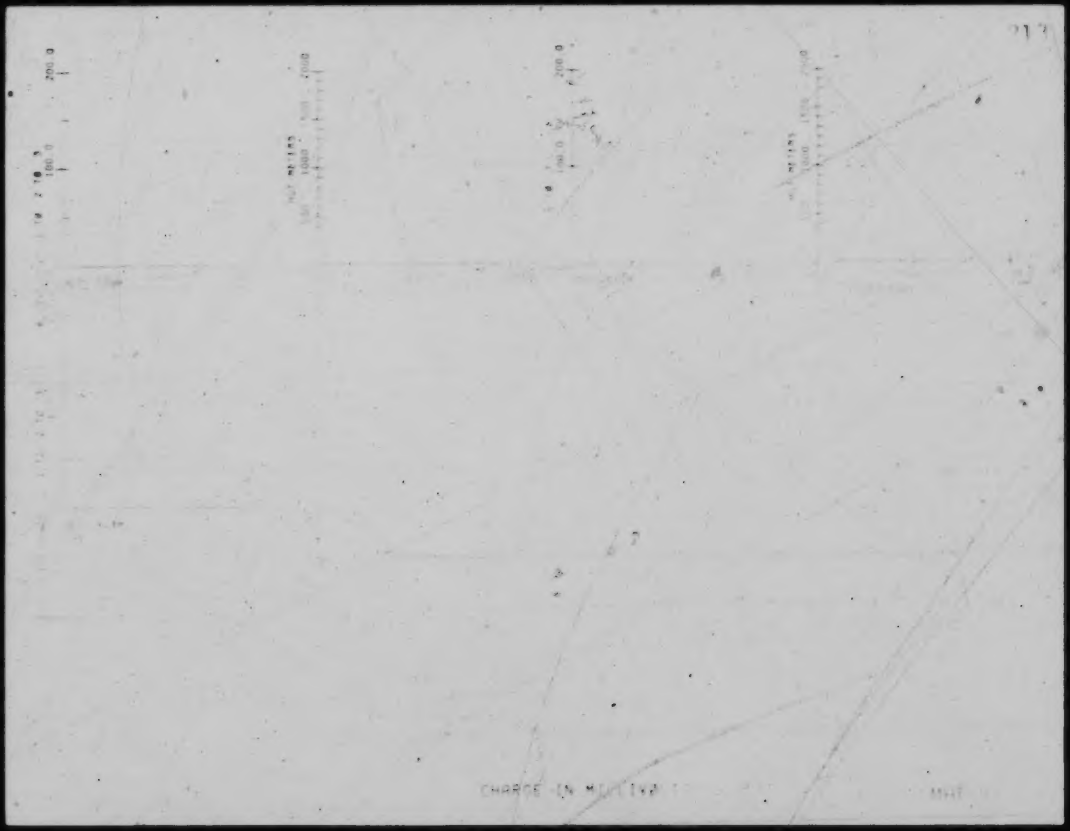
CENTRALIA

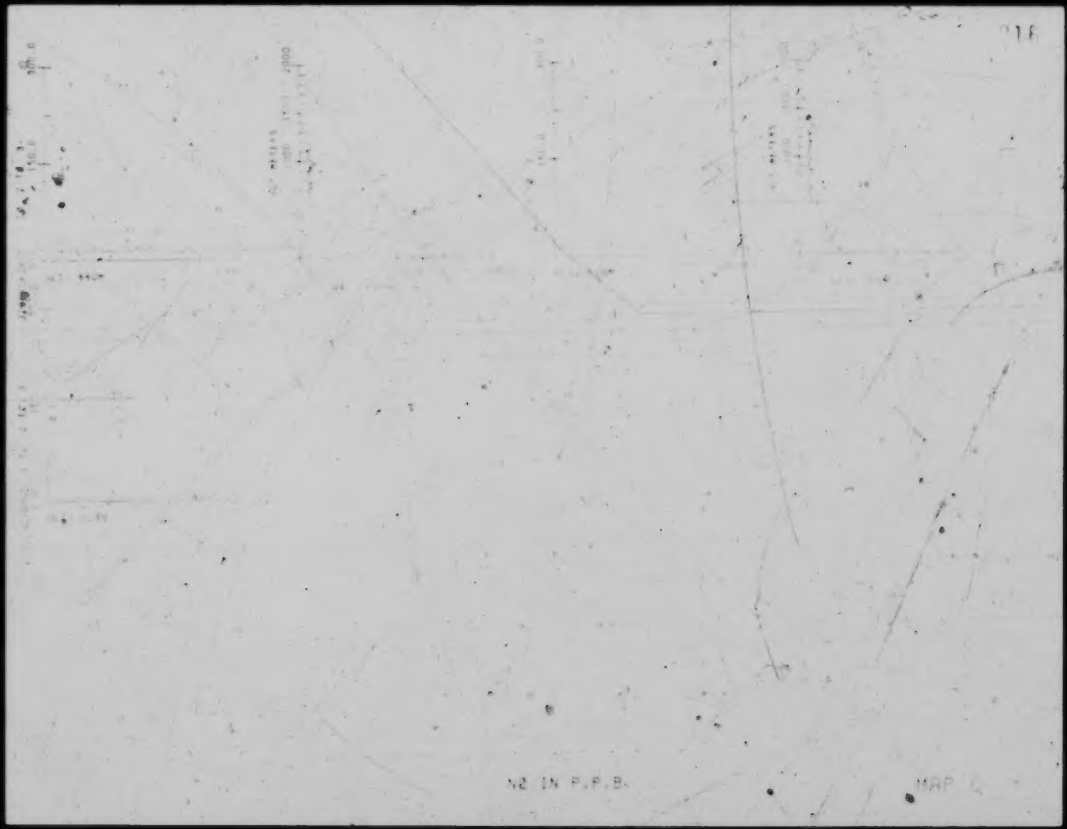

TEMP IN DEGREES C



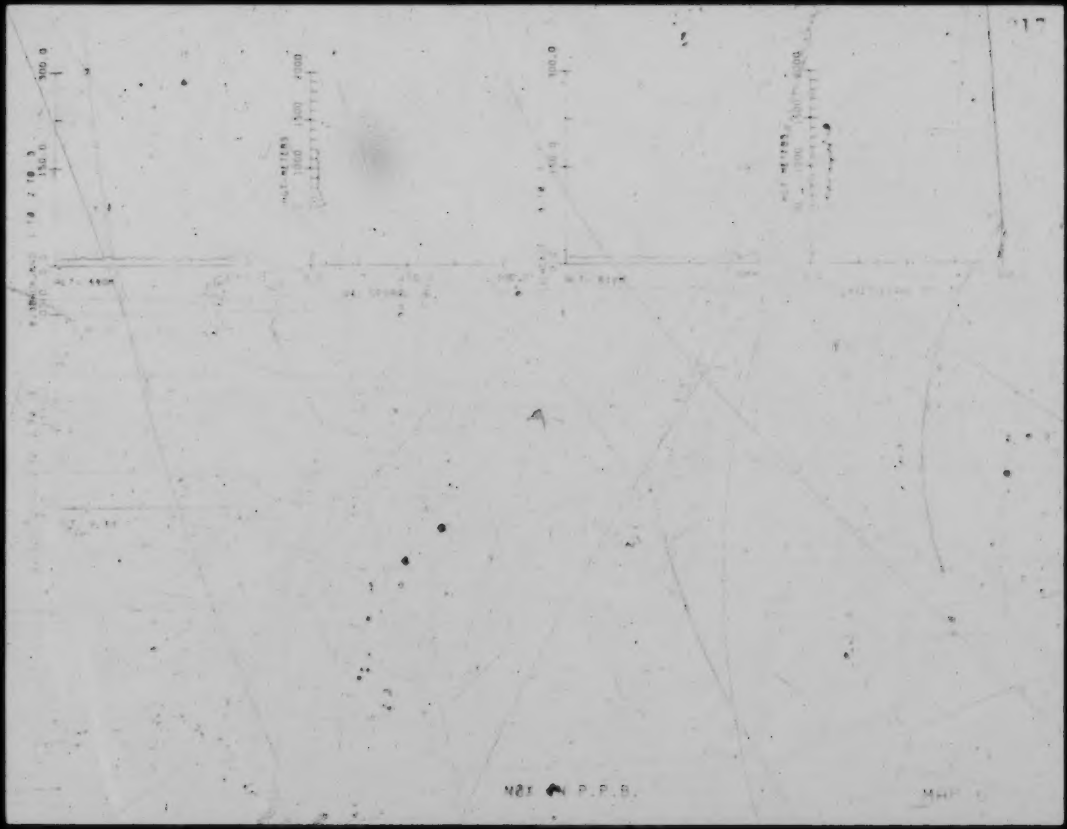
DEWPRINT IN DEGREES



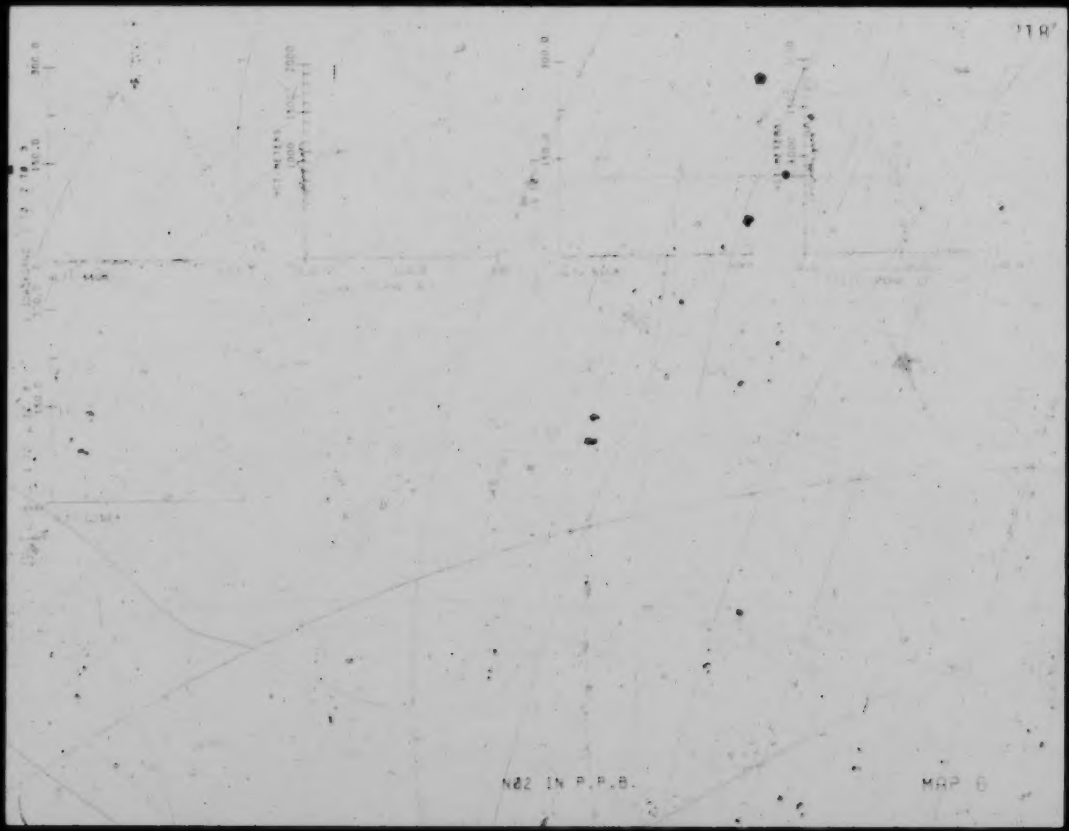



42 IN P.P.B.
MAP

R 11



R 18



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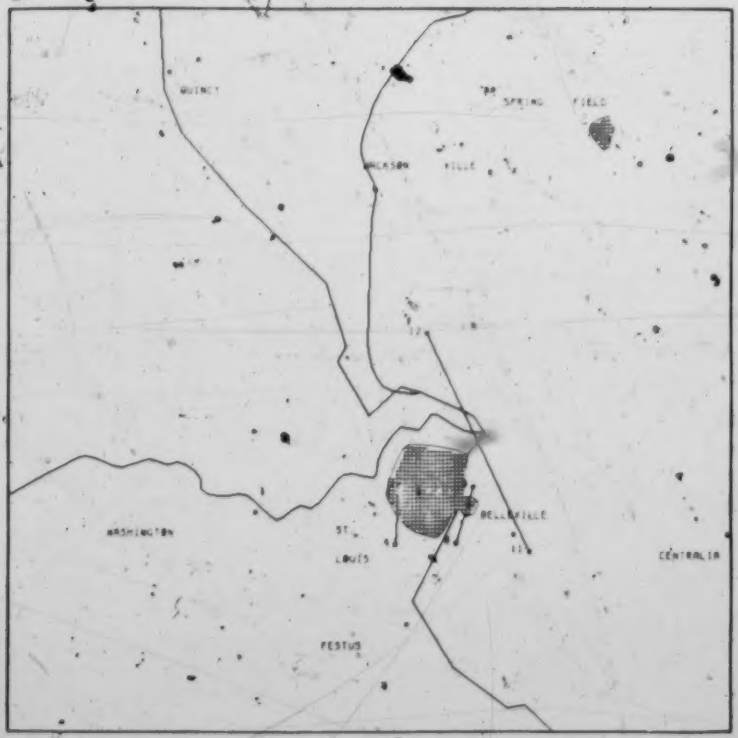
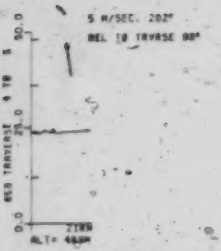
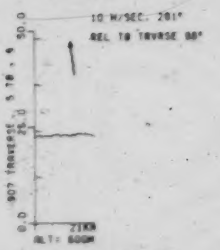
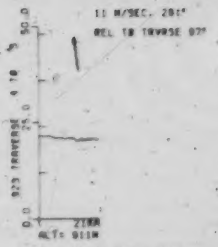
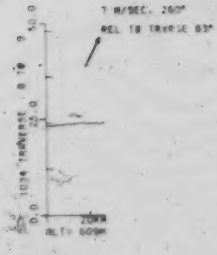
MAP 8

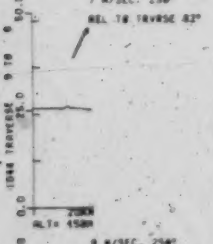


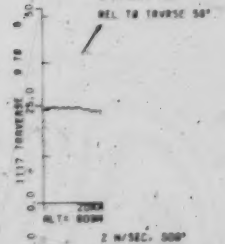


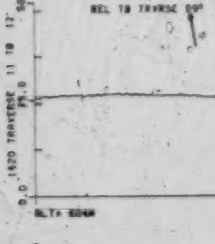


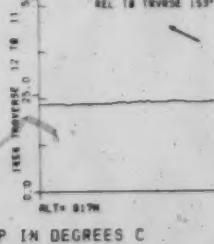






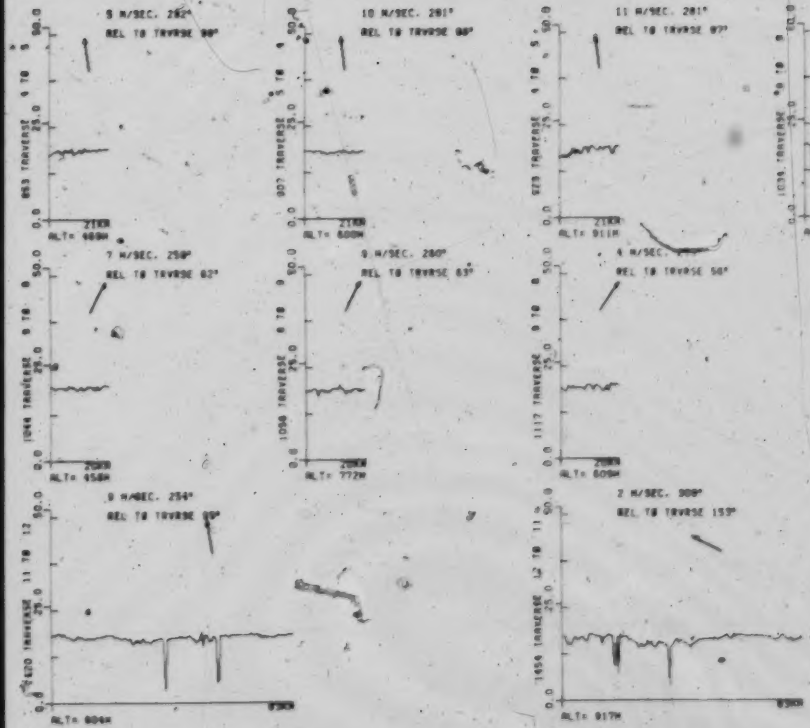


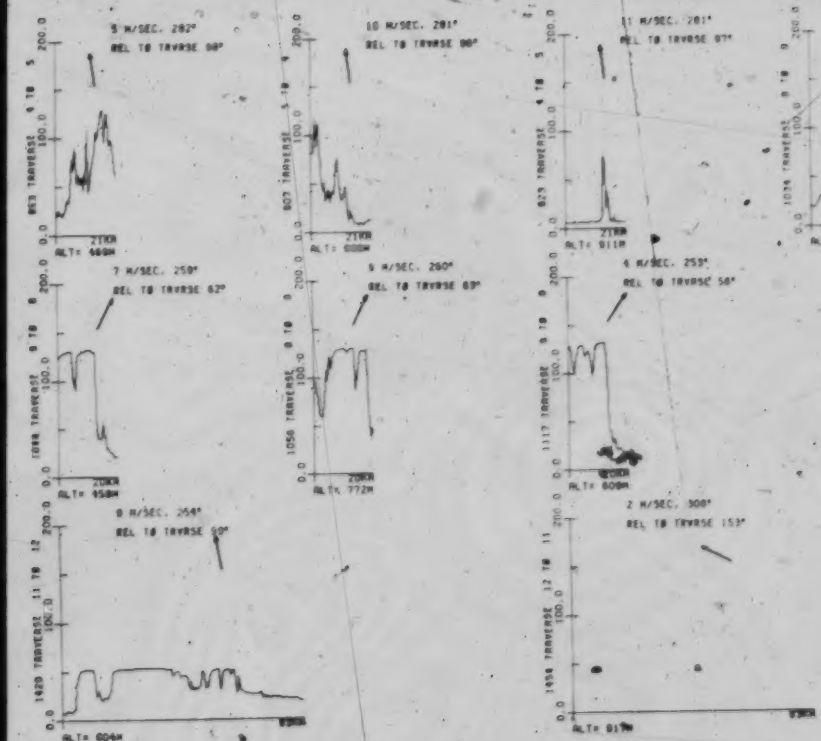




TEMP IN DEGREES C

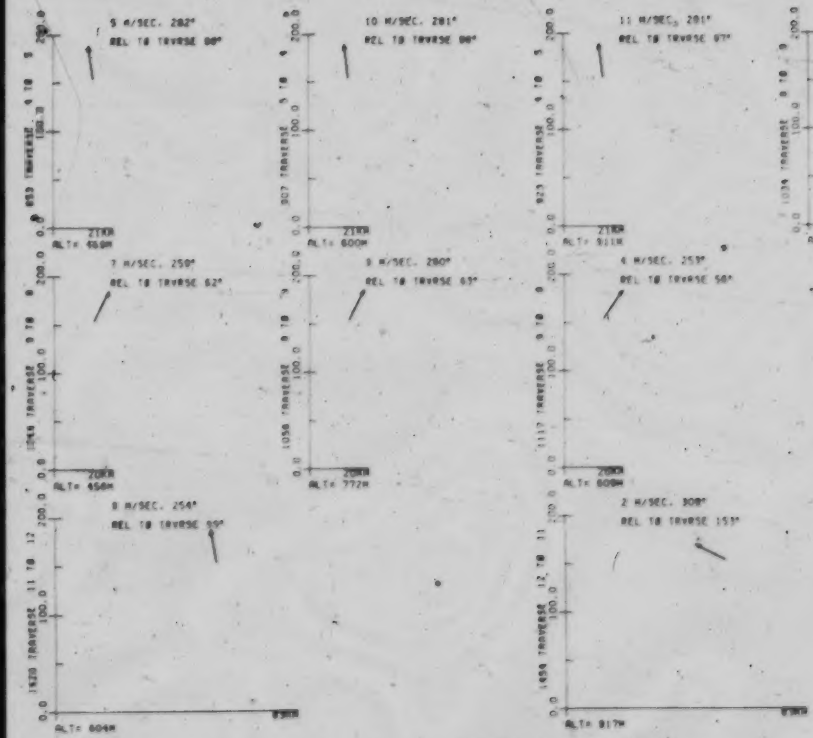
MAP 8


5 M/SEC. 282°
REL TO TRVRSE 99°
10 M/SEC. 281°
REL TO TRVRSE 98°
11 M/SEC. 281°
REL TO TRVRSE 97°
7 M/SEC. 280°
REL TO TRVRSE 95°
7 M/SEC. 259°
REL TO TRVRSE 82°
9 M/SEC. 260°
REL TO TRVRSE 83°
4 M/SEC.
REL TO TRVRSE 56°
9 M/SEC. 254°
REL TO TRVRSE 80°
2 M/SEC. 308°
REL TO TRVRSE 153°
DEWPOINT IN DEGREES C
MAP 8



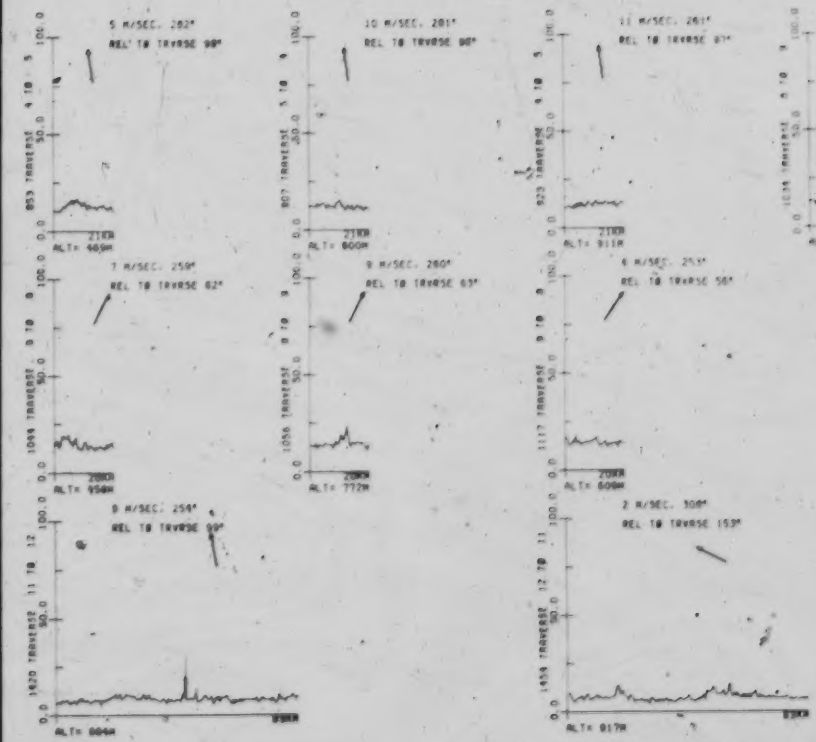
CNC IN $10^3 CM^{-3}$

MAP 8



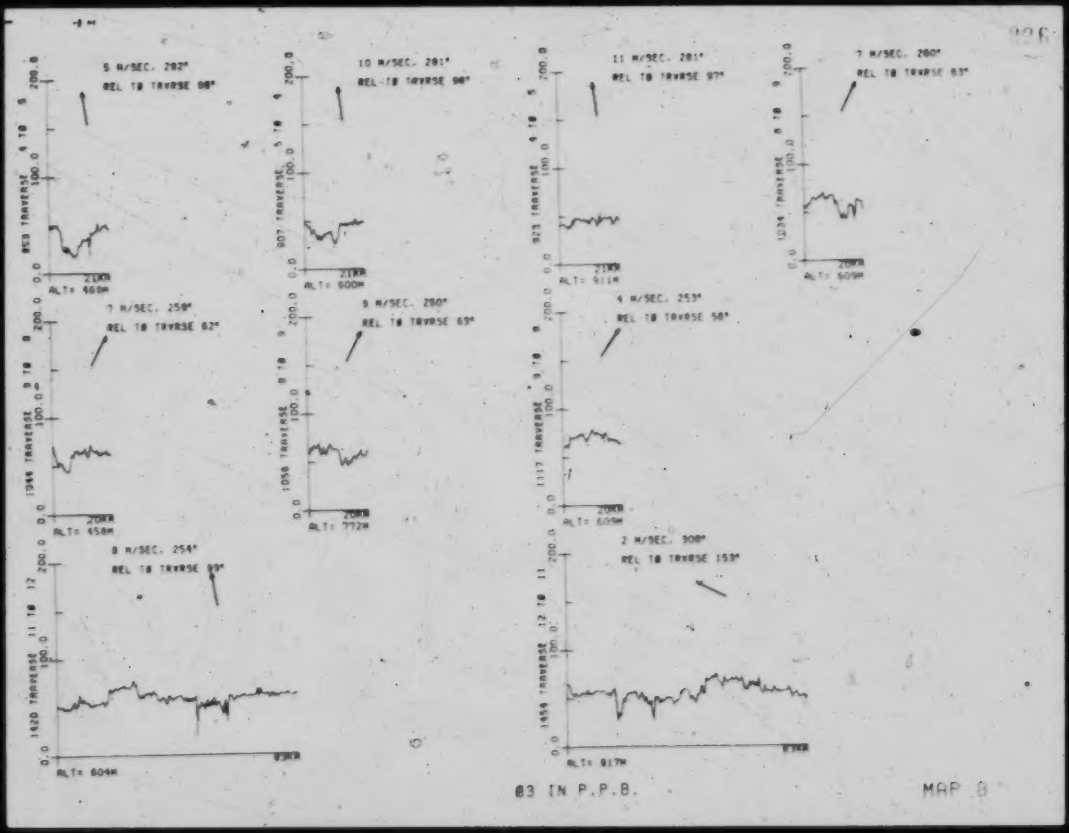
CHARGE IN MILLIVOLTS

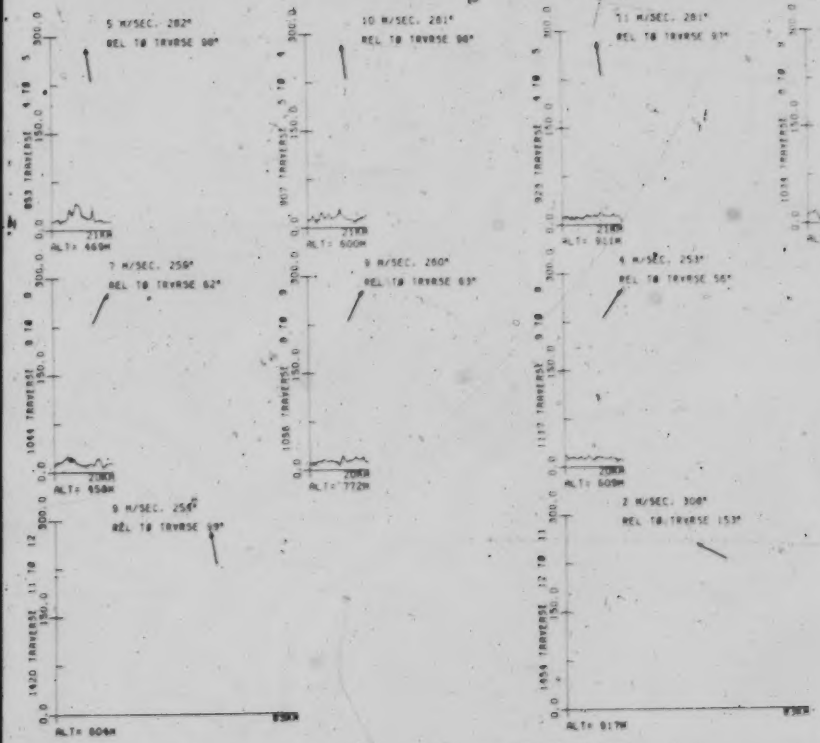
MAP 8



BSCAT IN $10^{-6}M^{-1}$

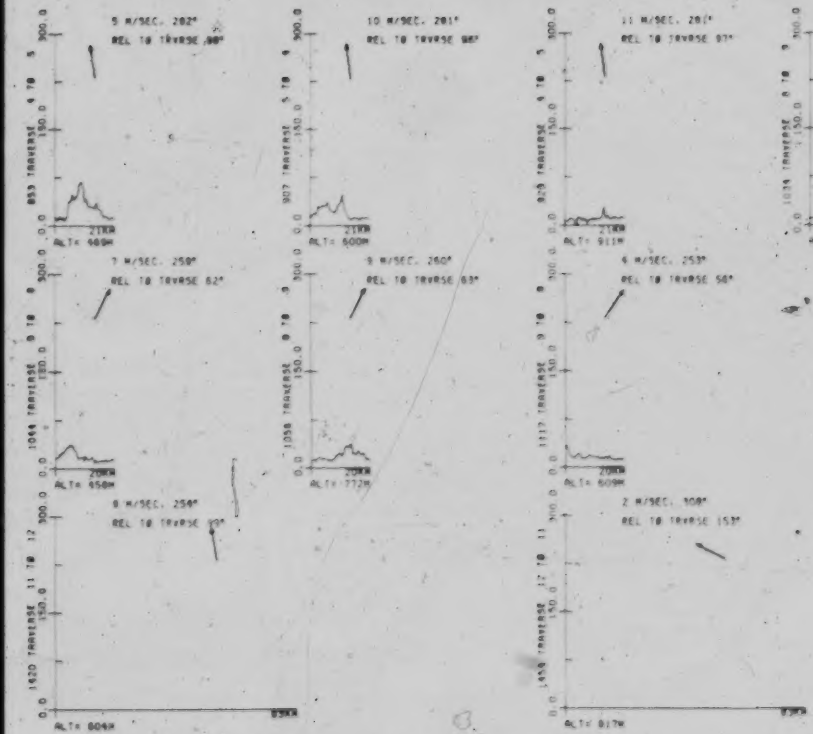
MAP 8


5 M/SEC. 282°
REL TO TRVRSE 98°
ALT= 469M
10 M/SEC. 281°
REL TO TRVRSE 98°
ALT= 600M
11 M/SEC. 281°
REL TO TRVRSE 97°
ALT= 911M
7 M/SEC. 280°
REL TO TRVRSE 83°
ALT= 609M
7 M/SEC. 259°
REL TO TRVRSE 62°
ALT= 458M
9 M/SEC. 280°
REL TO TRVRSE 63°
ALT= 772M
4 M/SEC. 253°
REL TO TRVRSE 58°
ALT= 609M
8 M/SEC. 254°
REL TO TRVRSE 99°
ALT= 604M
2 M/SEC. 308°
REL TO TRVRSE 153°
ALT= 817M
83 IN P.P.B.
MAP 8



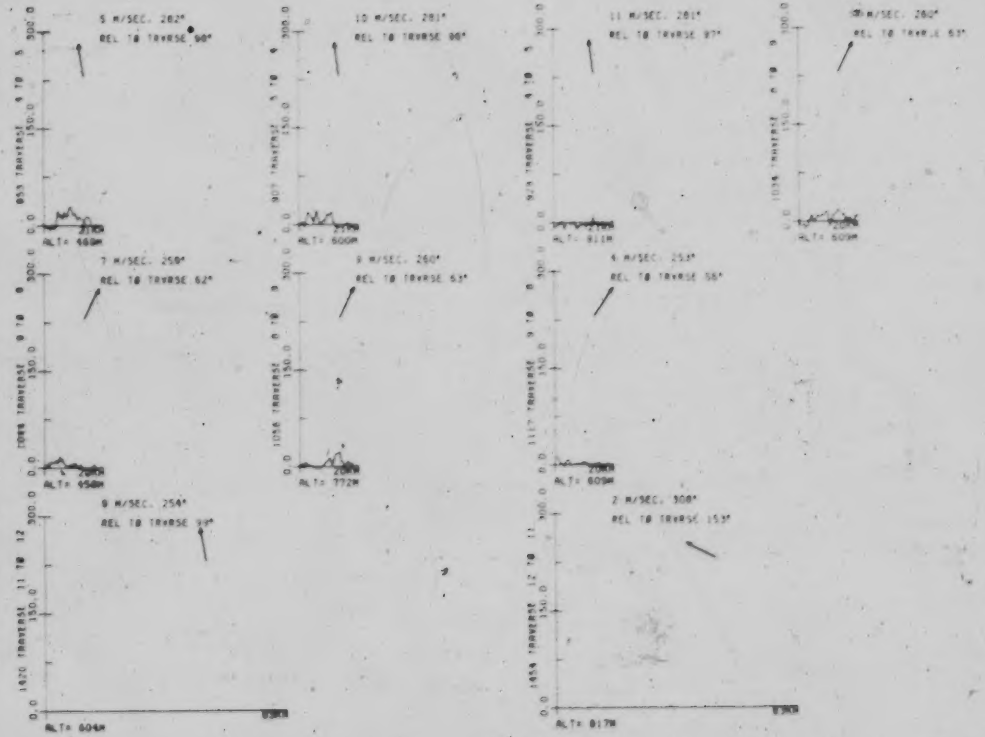
NO IN P.P.B.

MAP 8



NØX IN P.P.B.

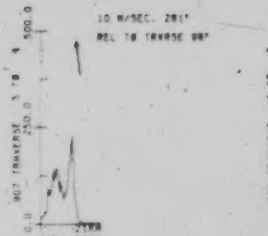
MAP 8

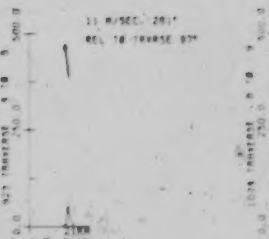


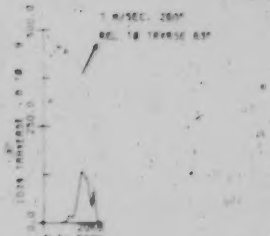
N82 IN P.P.B.

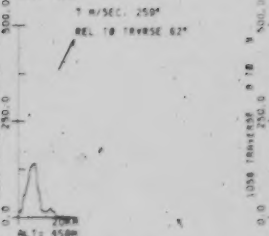
MAP 21

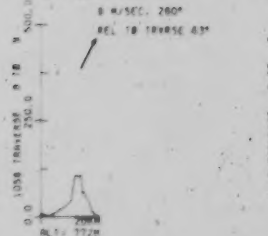
5 M/SEC. 282°
REL TO TRVRSE 88°
ALT: 468M


10 M/SEC. 281°
REL TO TRVRSE 98°
ALT: 500M

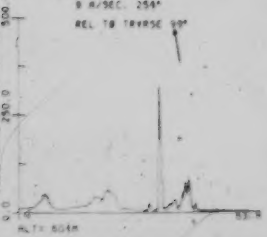

11 M/SEC. 281°
REL TO TRVRSE 97°
ALT: 511M

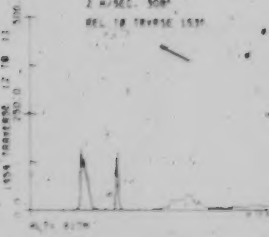

7 M/SEC. 280°
REL TO TRVRSE 83°
ALT: 509M


7 M/SEC. 259°
REL TO TRVRSE 62°
ALT: 458M


8 M/SEC. 280°
REL TO TRVRSE 83°
ALT: 772M

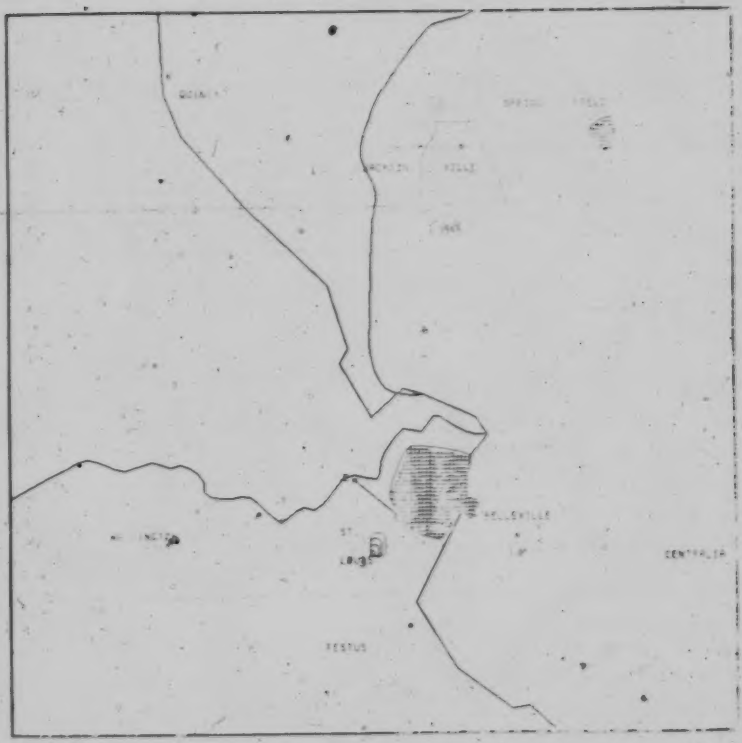
6 M/SEC. 253°
REL TO TRVRSE 56°
ALT: 609M

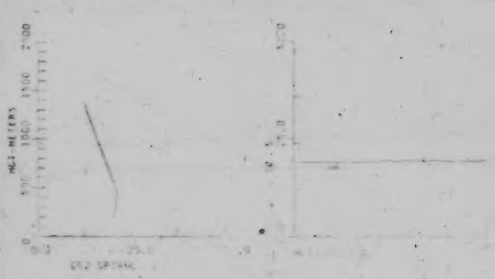

9 M/SEC. 254°
REL TO TRVRSE 59°
ALT: 604M


2 M/SEC. 308°
REL TO TRVRSE 153°

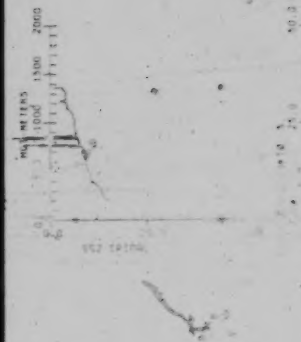
61971876

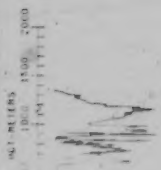
MAP 7





TEMP IN DEGREES C


METERS
1000
1500
2000


METERS
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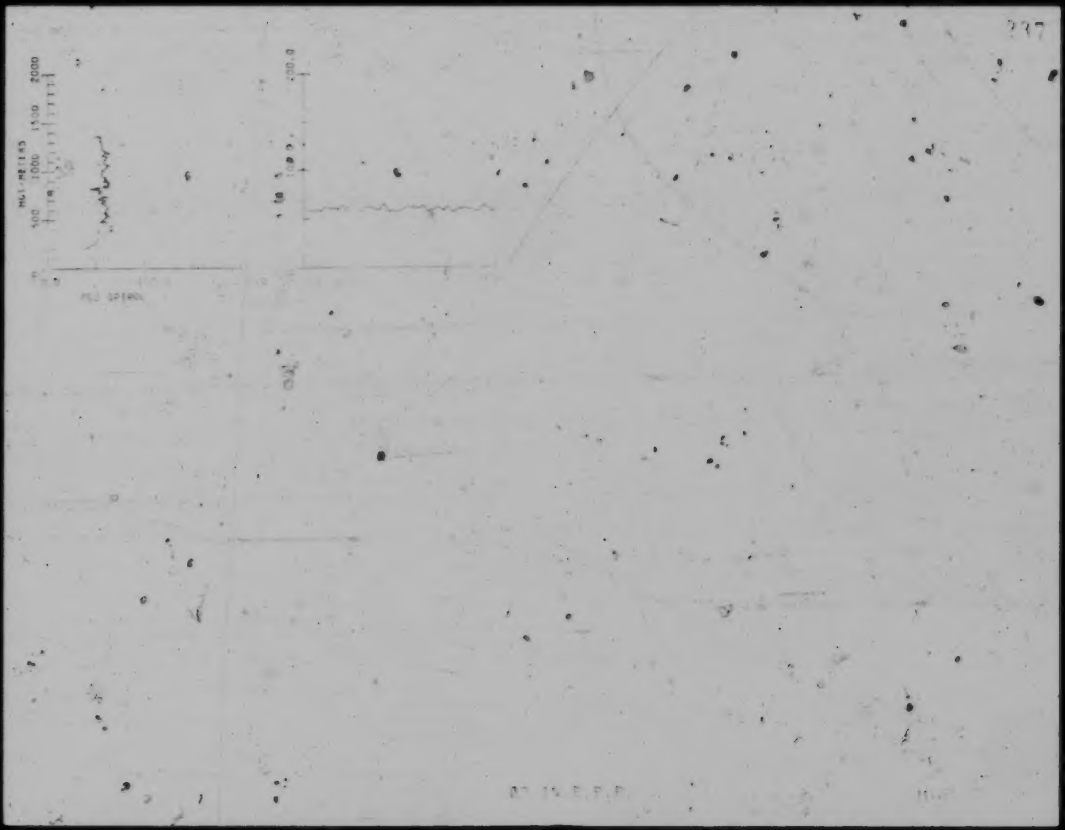
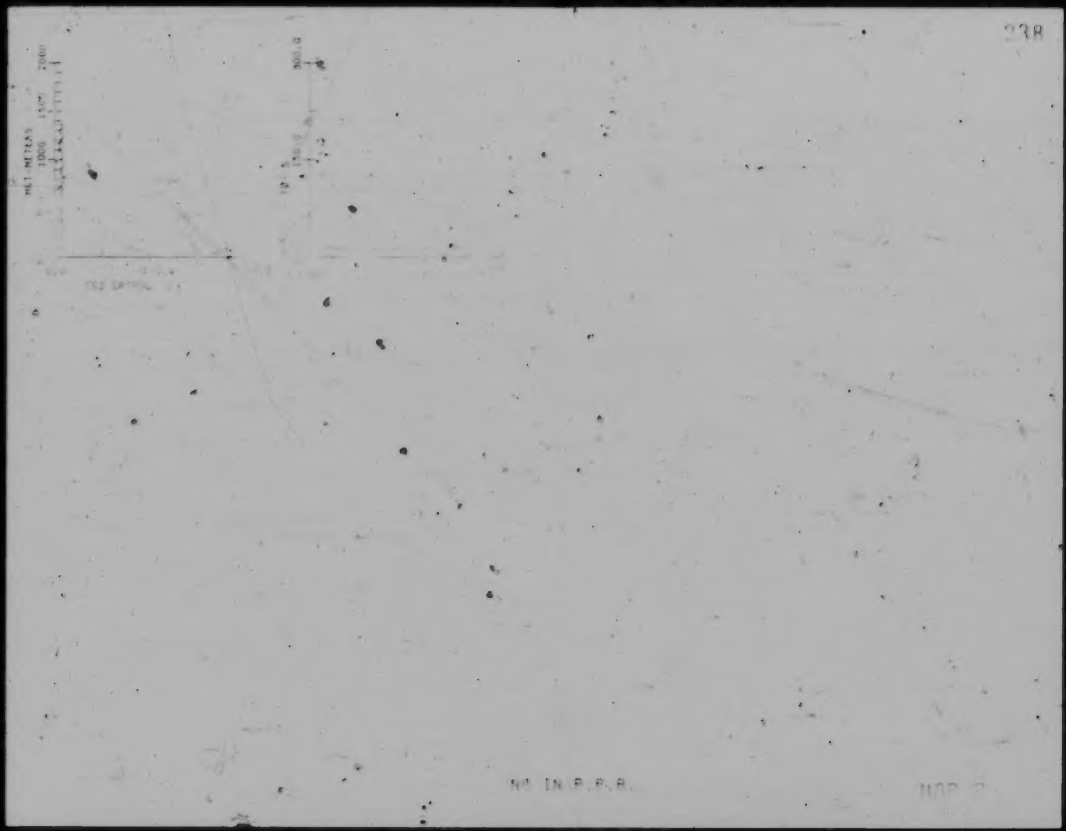
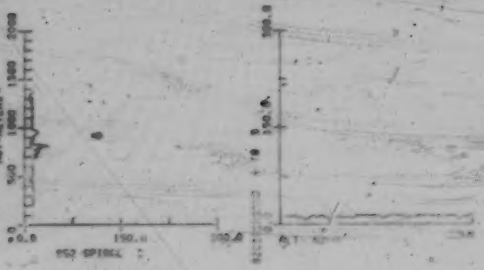




INDEX

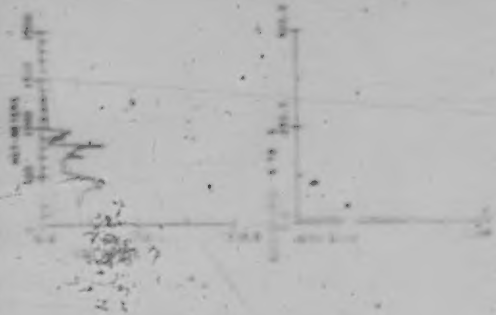
Description/Date	Document Pages	Fiche	Starting Row & Column
Title, Index and Preface Pages	1-9	001	B-1
Part I - Meteorology Research, Incorporated Data.		001	B-7
Map 1 602/7-1-76	10-11	001	B-8
Map 2 603/7-2-76	12-71	001	C-20
Map 3 605/7-3-76	72-103	001	E-12
Map 4 607/7-6-76	104-114	001	G-4
Map 4 609/7-7-76	115-125	001	G-15
Map 5 609/7-7-76	126-136	001	H-6
Map 5 613/7-14-76	137-147	001	I-7
Map 6 613/7-14-76	148-157	001	I-18
Map 7 614/7-14-76	158-205	001	K-8
Map 8 616/7-15-76	206-219	001	L-9
Map 8 616/7-15-76	220-230	001	L-20
Map 9 619/7-18-76	231-241	001	M-11
Map 8 620/7-18-76	242-252	002	B-4
Map 9 619/7-18-76	253-263	002	B-15
Map 9' 621/7-18-76	264-274	002	C-6
Map 10 620/7-18-76	275-285	002	C-17
Map 11 621/7-18-76	286-296	002	D-8
Map 10 622/7-20-76	297-307	002	D-19
Map 12 622/7-20-76	308-329	002	E-10
Map 11 625/7-23-76	330-340	002	F-12
Map 12 626/7-23-76	341-351	002	G-3
Map 13 625/7-23-76	352-372	002	G-14
Map 14 626/7-23-76	373-383	002	M-15
Map 15 627/7-24-76	384-395	002	I-6
Map 13 632/7-26-76	396-406	002	I-18
Map 16 632/7-26-76	407-417	002	J-9
Map 14 634/7-27-76	418-428	002	J-20
Map 17 634/7-27-76	429-439	002	K-11
Map 15 635/7-28-76	440-450	002	L-2
Map 18 635/7-28-76	451-471	002	L-13
Map 19 636/7-28-76	472-482	002	M-14
Map 16 637/7-30-76	483-493	003	B-7
Map 20 637/7-30-76	494-514	003	B-18
Map 21 638/7-30-76	515-535	003	C-19
Part II - University of Washington Data.	536	003	D-20
Map 1 6-27-76	537-548	003	E-1
Map 2 7-5-76	549-554	003	E-13
Map 3 7-5-76	555-560	003	E-19
Map 2 7-5-76	561-566	003	F-5
Map 3 7-7-76	567-572	003	F-11
Map 4 7-7-76	573-583	003	F-17
Map 4 7-9-76	584-589	003	G-8
Map 5 7-9-76	590-600	003	G-14

Description/Date		Document Pages	Fiche #	Starting Row and Column
Map 5	7-9&10-76	601-606	003	H-6
Map 6	7-9&10-76	607-612	003	H-11
Map 6	7-12-76	613-618	003	H-17
Map 7	7-12-76	619-624	003	I-3
Map 8	7-13-76	625-630	003	I-9
Map 7	7-14-76	631-636	003	I-15
Map 9	7-14-76	637-642	003	J-1
Map 8	7-15-76	643-648	003	J-7
Map 10	7-15-76	649-659	003	J-13
Map 9	7-18-76	660-665	003	K-4
Map 10	7-18-76	666-671	003	K-10
Map 11	7-18-76	672-677	003	K-16
Map 12	7-18-76	678-683	003	L-2
Map 11	7-20-76	684-689	003	L-8
Map 13	7-20-76	690-695	003	L-14
Map 12	7-23-76	696-701	003	L-20
Map 14	7-23-76	702-707	003	M-6
Map 15	8-3-76	708-713	003	M-12
Form 2220-1		714	003	M-18



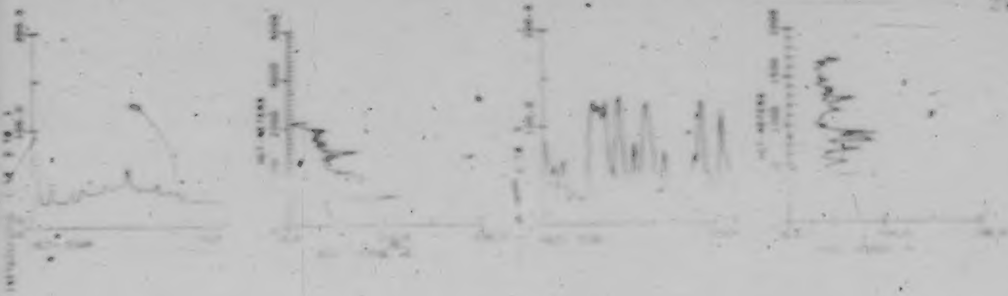
NOT IN P.P.B.

MAP



62071876

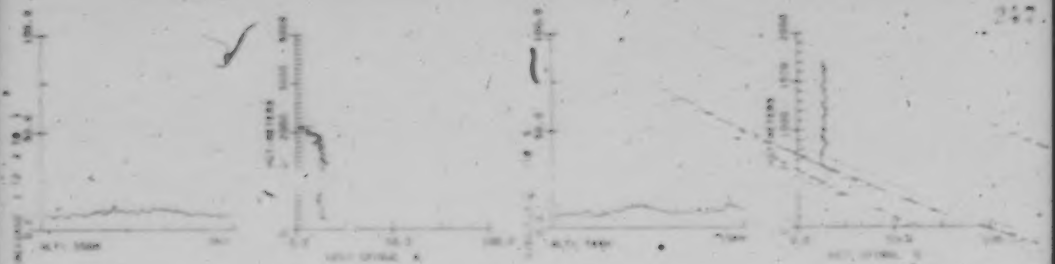
DEWPOINT IN DEGREES C



CNC IN $10^3 CM^{-3}$

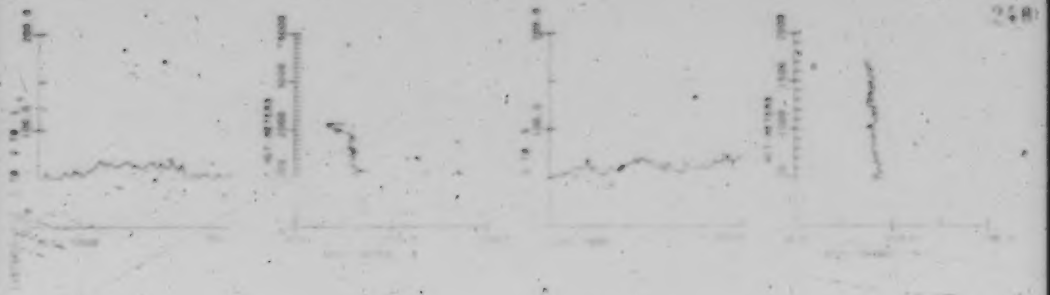
MAP 3

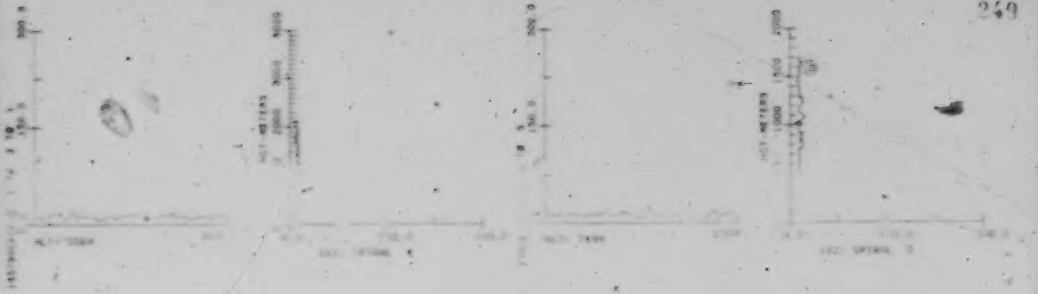
CHARGE IN MILLIVOLTS

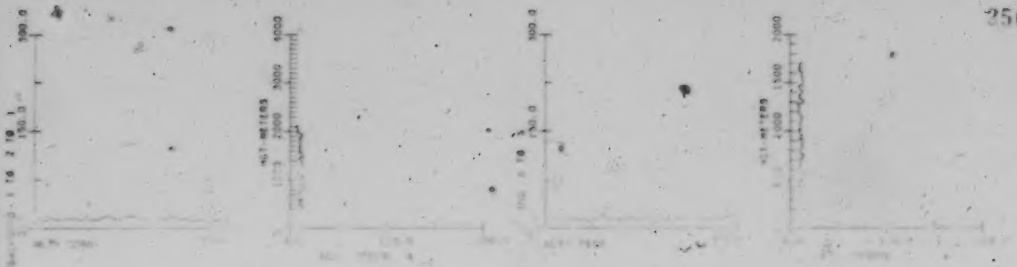


ESCAT IN $10^{-6}m^{-1}$

MAP 8

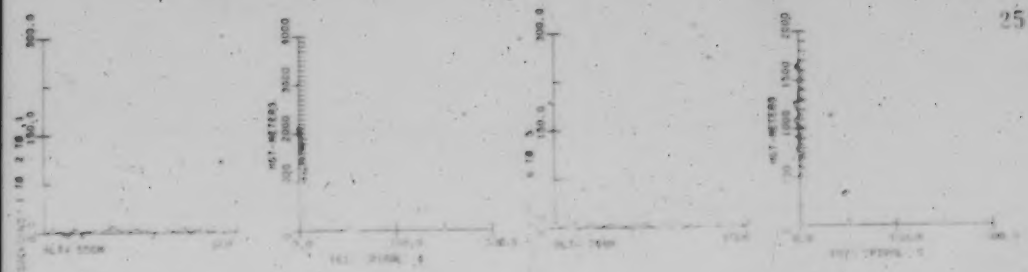






NOT IN P.P.S.

MAP 0



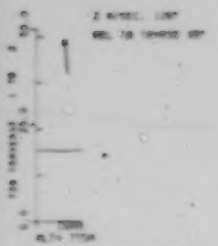
NO2 IN P.P.B.

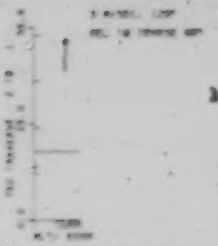
MAP B

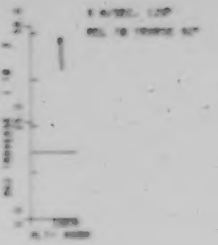
500.0
250.0
0
500.0
250.0
0

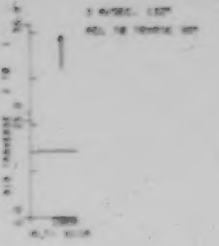
61971876

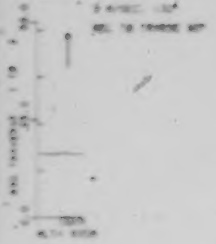
MAP 9





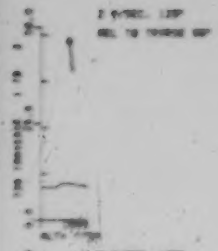


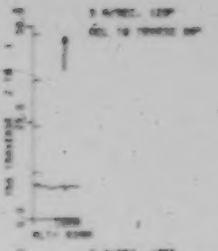


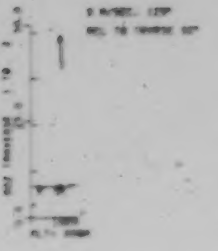


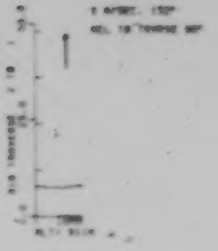
TEMP IN DEGREES C

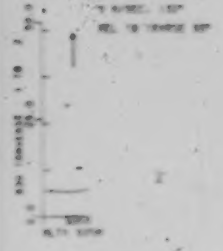
MAP 9

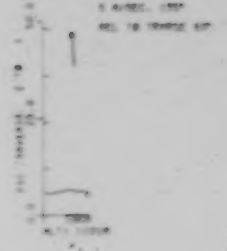






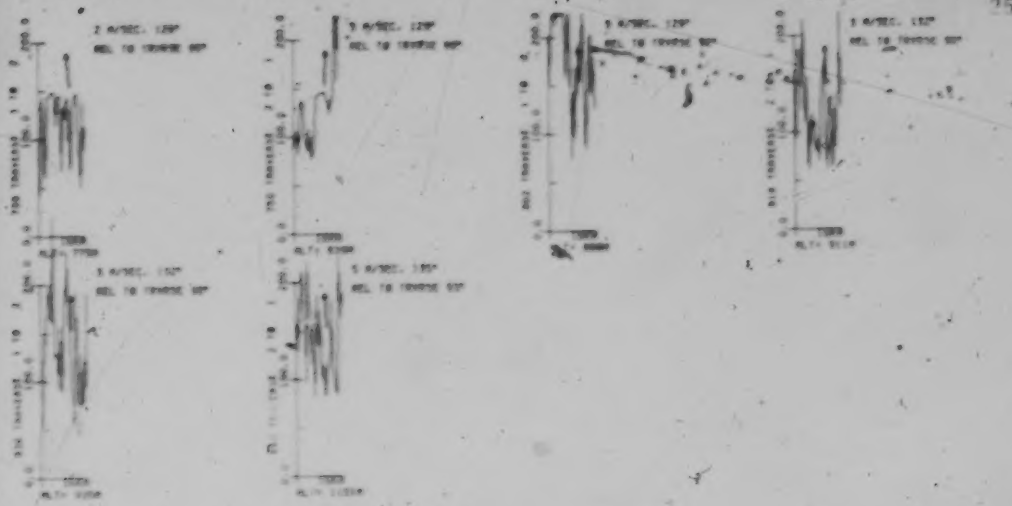






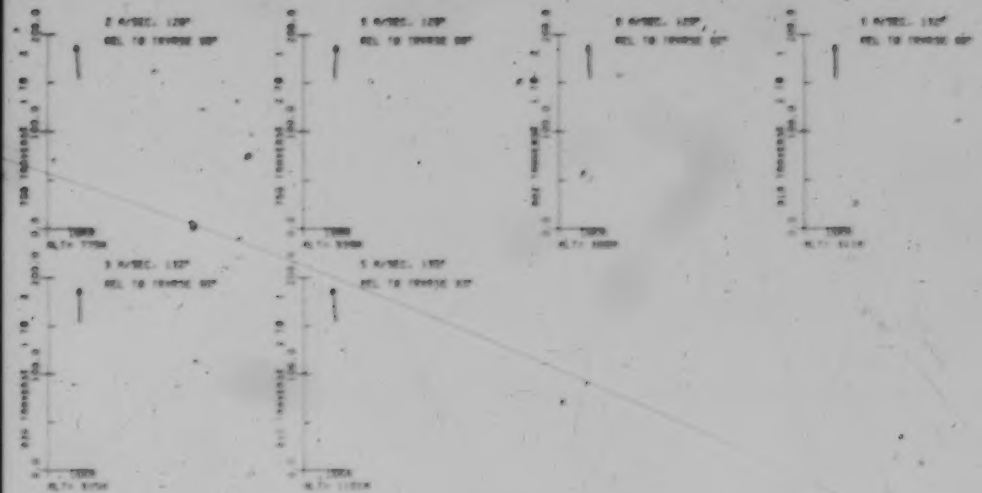
DEWPOINT IN DEGREES C

MAP 3



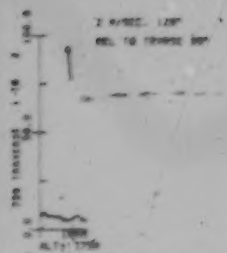
CNC IN $10^3 cm^{-3}$

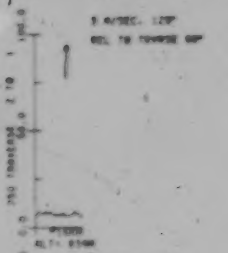
MAP 9

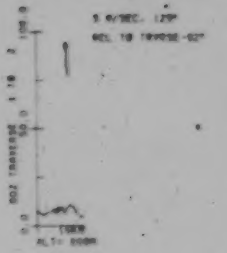


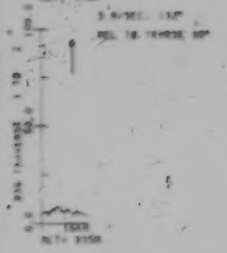
CHARGE IN MILLIVOLTS

MAP 9



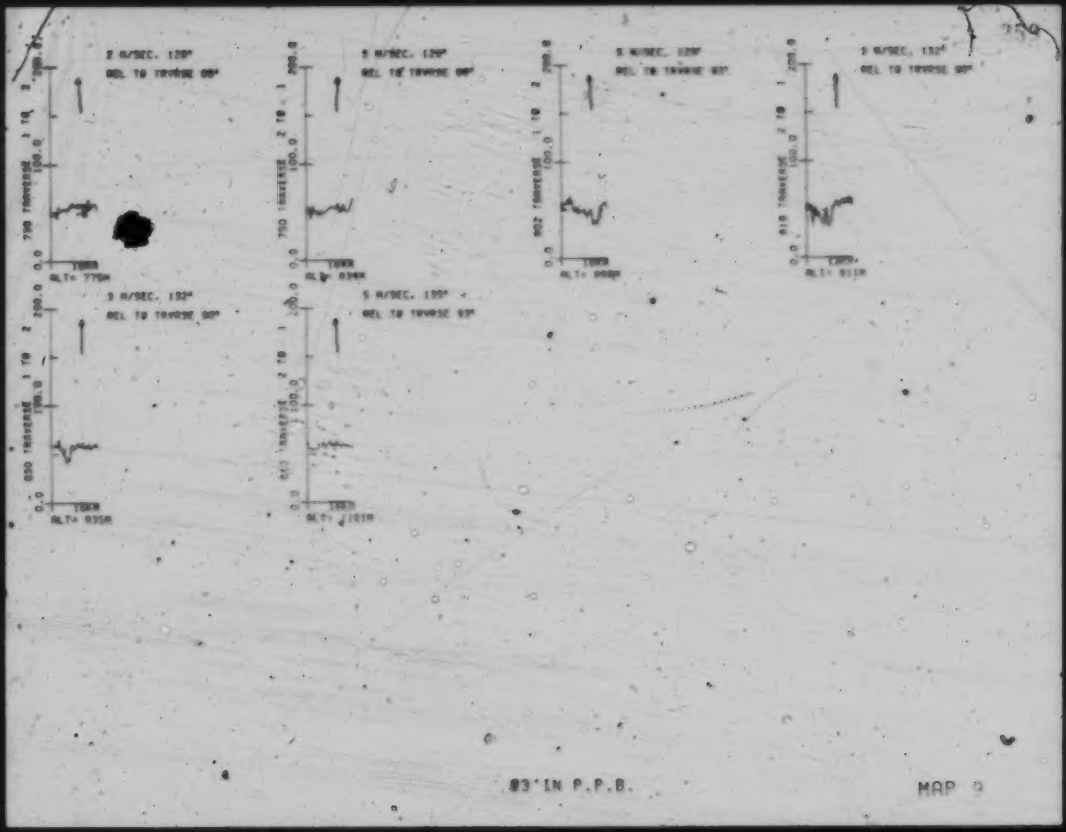


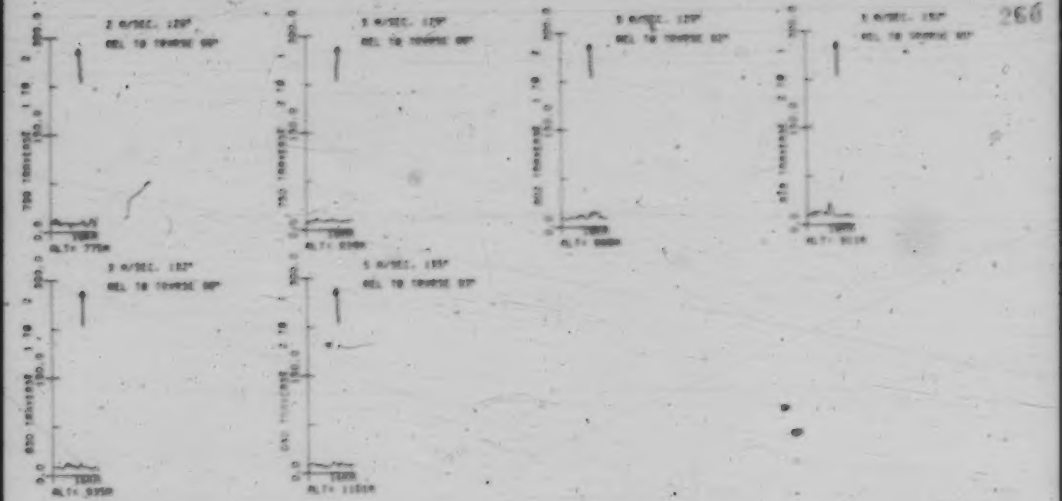


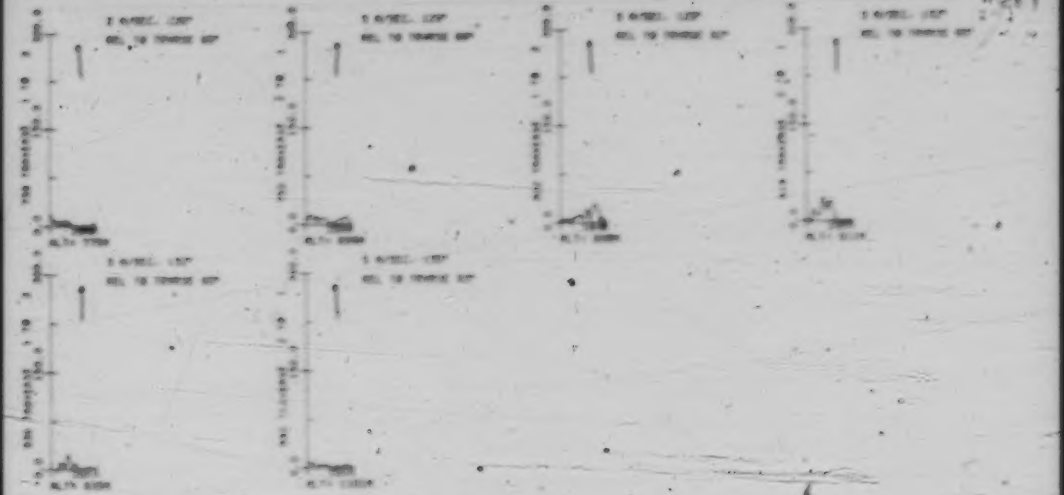


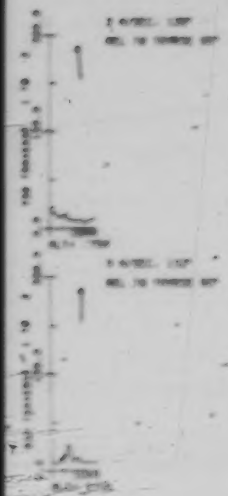
BSCAT IN $10^{-6}M^{-1}$

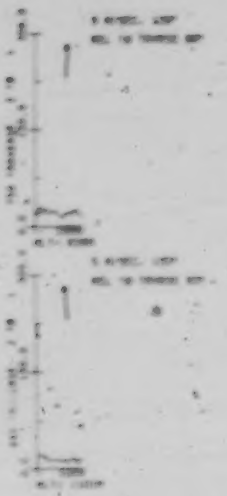
MAP 9

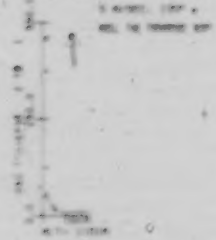

2 M/SEC. 120°
REL TO TRVRSE 00°
3 M/SEC. 120°
REL TO TRVRSE 00°
5 M/SEC. 120°
REL TO TRVRSE 00°
5 M/SEC. 132°
REL TO TRVRSE 00°
3 M/SEC. 132°
REL TO TRVRSE 00°
5 M/SEC. 135°
REL TO TRVRSE 00°
750 TRAVERSE 1 TO 2
750 TRAVERSE 2 TO 1
802 TRAVERSE 1 TO 2
810 TRAVERSE 2 TO 1
830 TRAVERSE 1 TO 2
830 TRAVERSE 2 TO 1
ALT= 775M
ALT= 834M
ALT= 911M
ALT= 935M
ALT= 1101M
03 IN P.P.B.
MAP 9





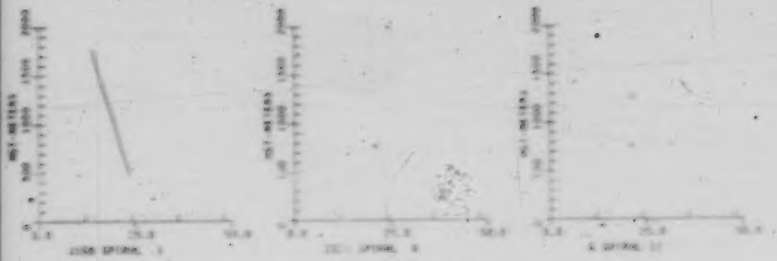






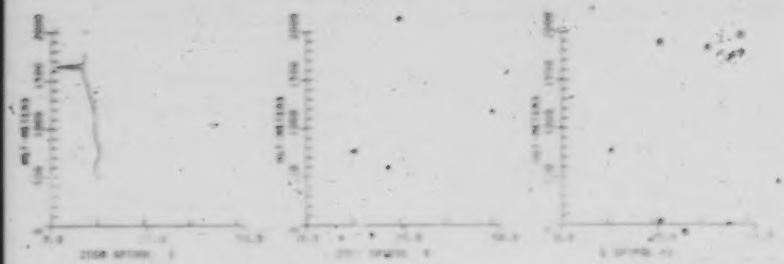
62-71876

MAP 9



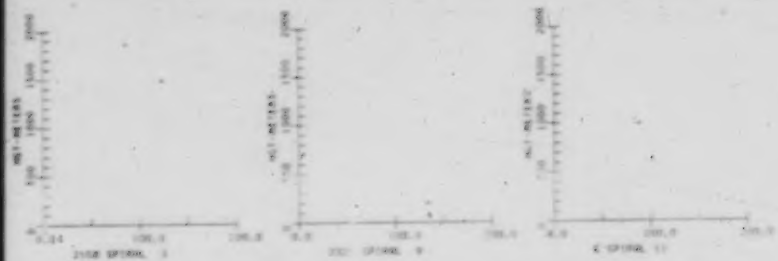
TEMP IN DEGREES C

MAP 2



DEWPOINT IN DEGREES C

MAP 3

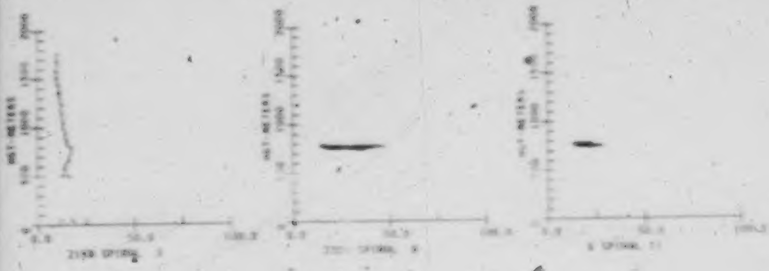


ENC IN $10^3 cm^{-1}$

MAP 9

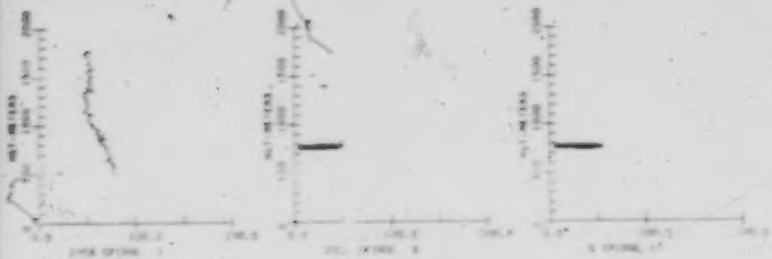
CHARGE IN MILLIVOLTS

MAP 9



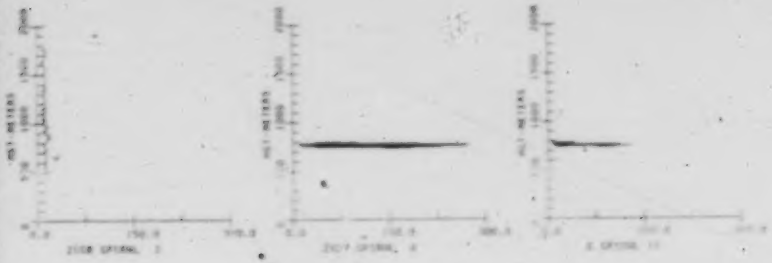
BSCAT IN $10^{-6} m^{-1}$

MAP 9



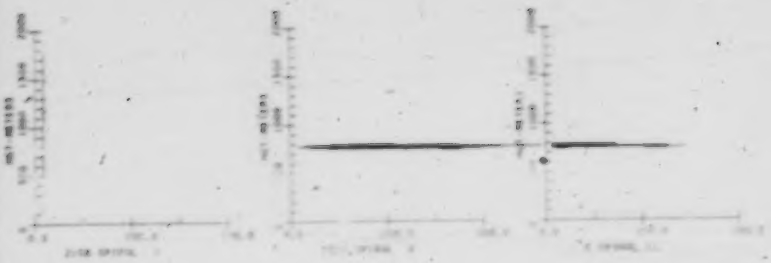
81 IN P.P.B.

MAP 3



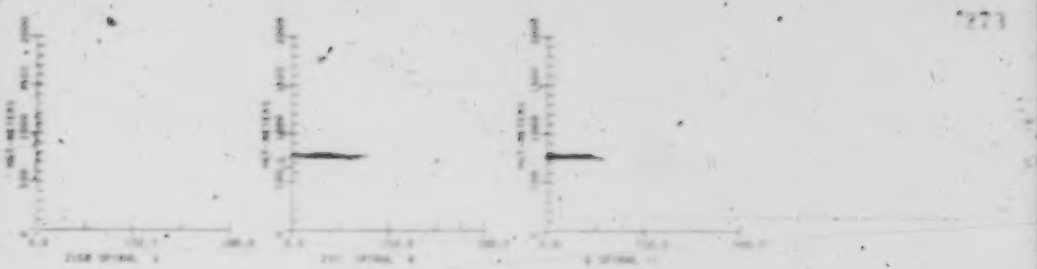
NO IN P.P.B.

MAP 9



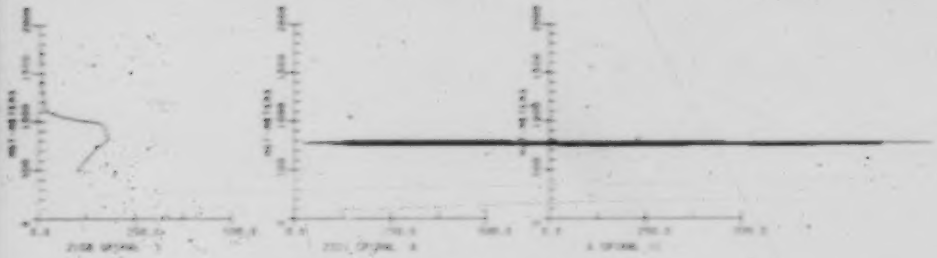
NOT IN P.P.B.

MAP 9



MRI IN P.P.D.

MAP 9.

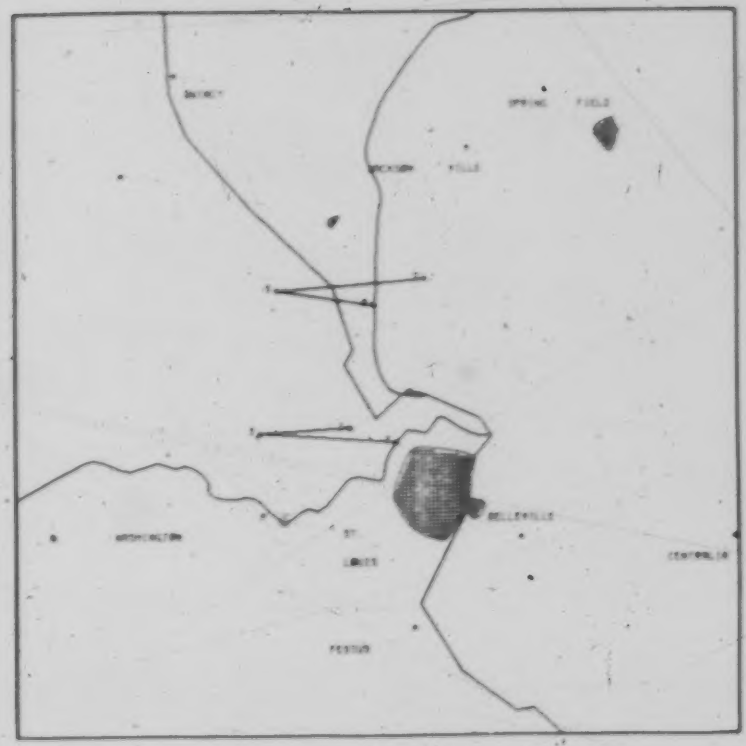


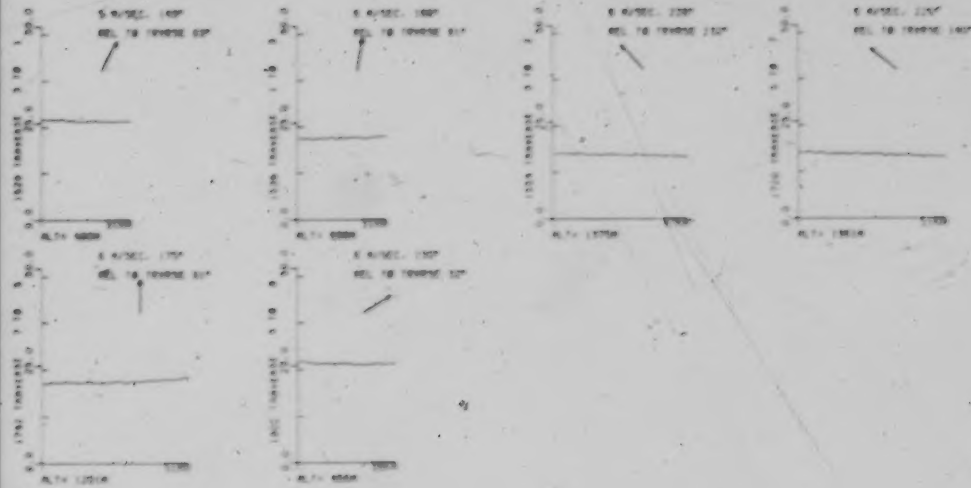
182 IN P.P.B.

MAP 9

62071876

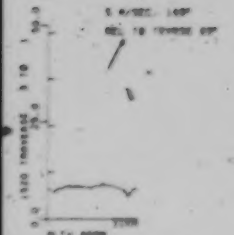
MAP 10

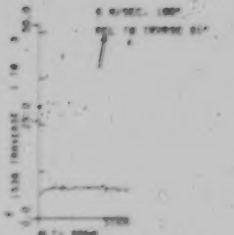


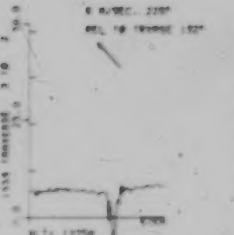


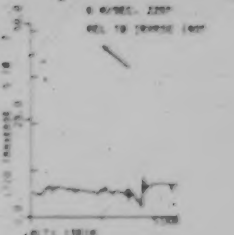
TEMP IN DEGREES C

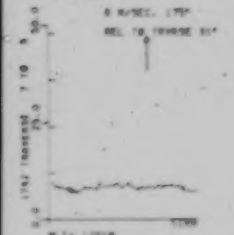
MRP, 10

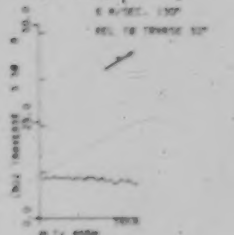






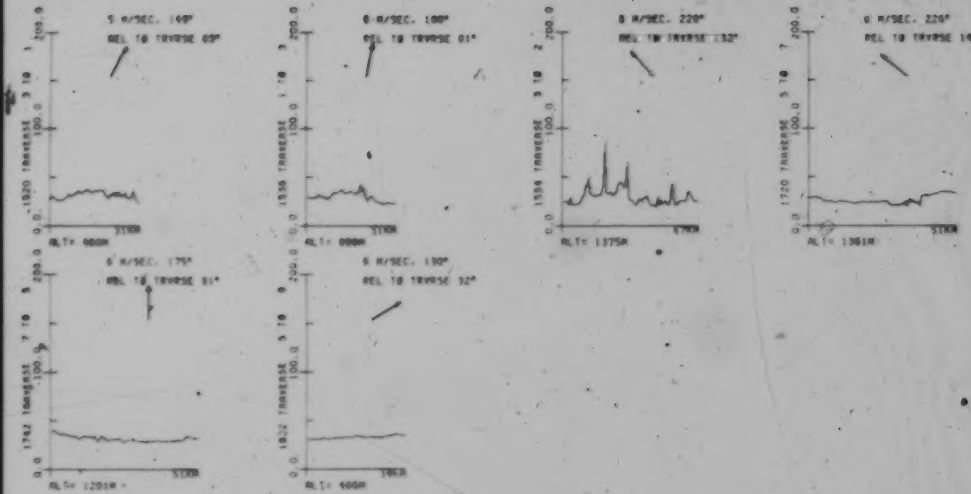






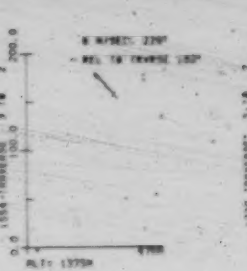
DEWPOINT IN DEGREES C

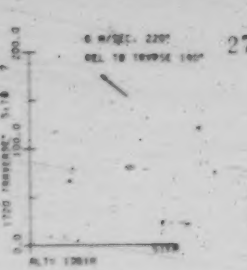
MAP 10

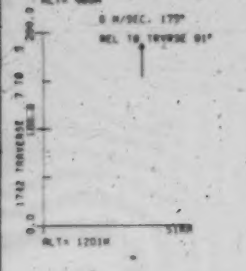


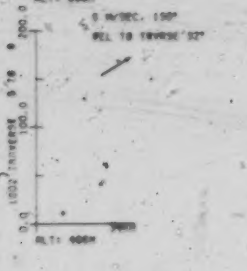
CNC IN $10^3 CM^{-3}$

MAP 10



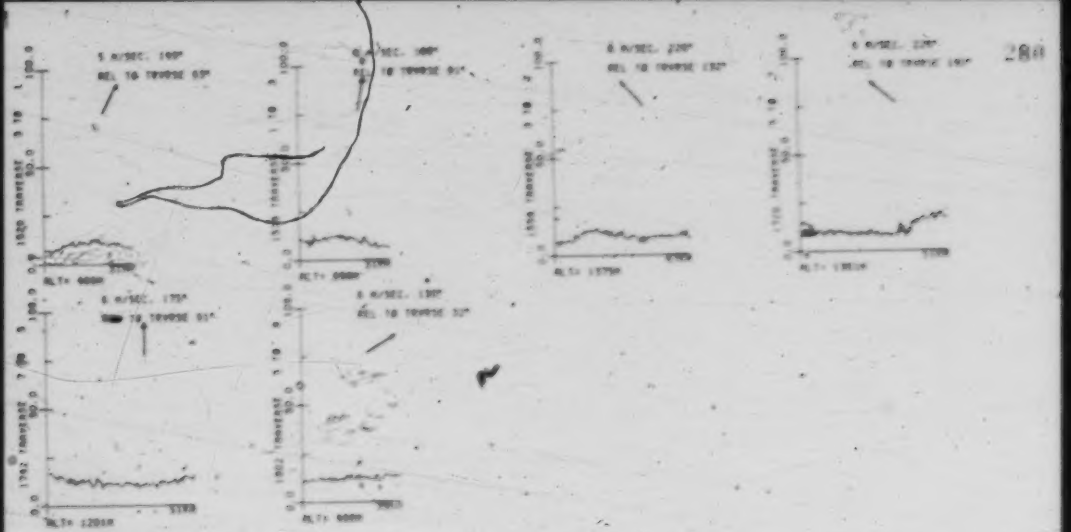






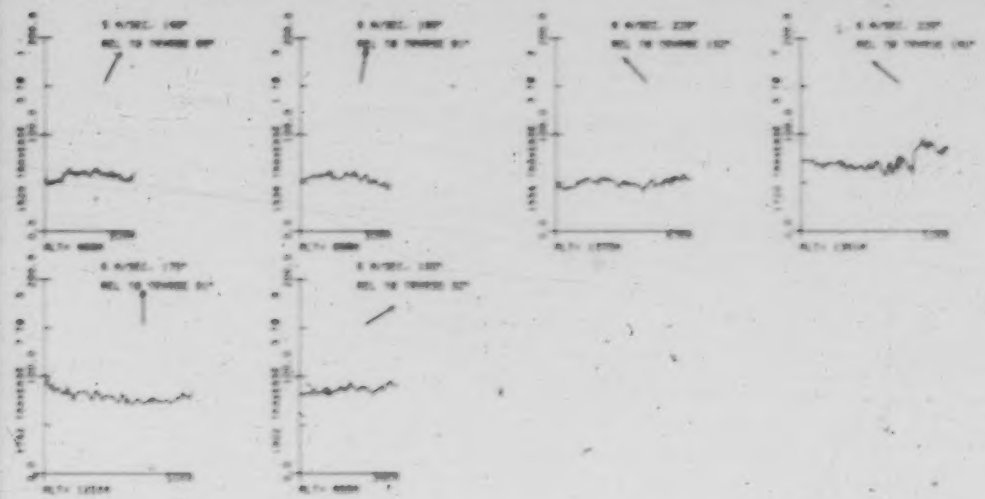
CHARGE IN MILLIVOLTS

MAP 10



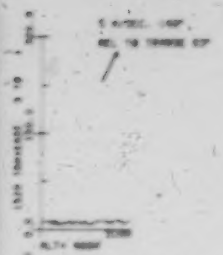
BSCAT IN $10^{-6}M^{-1}$

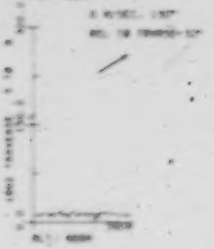
MAP 10

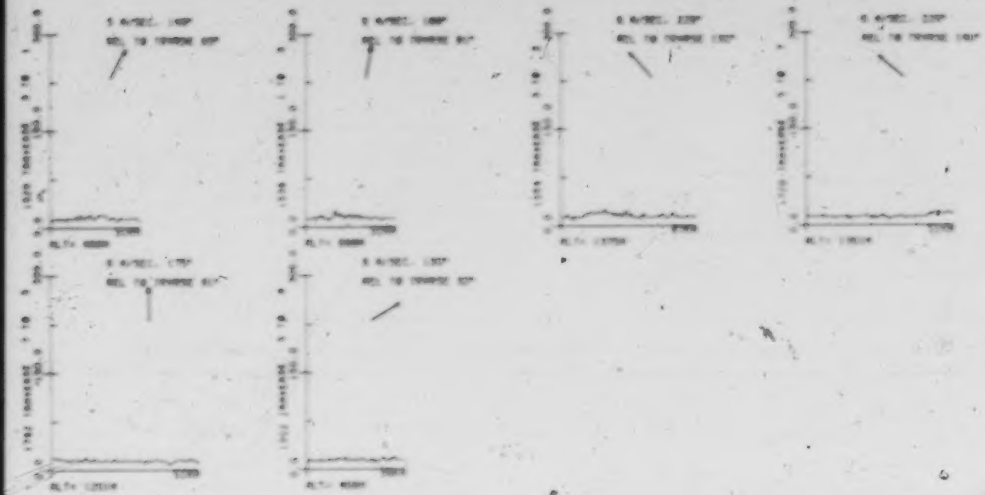


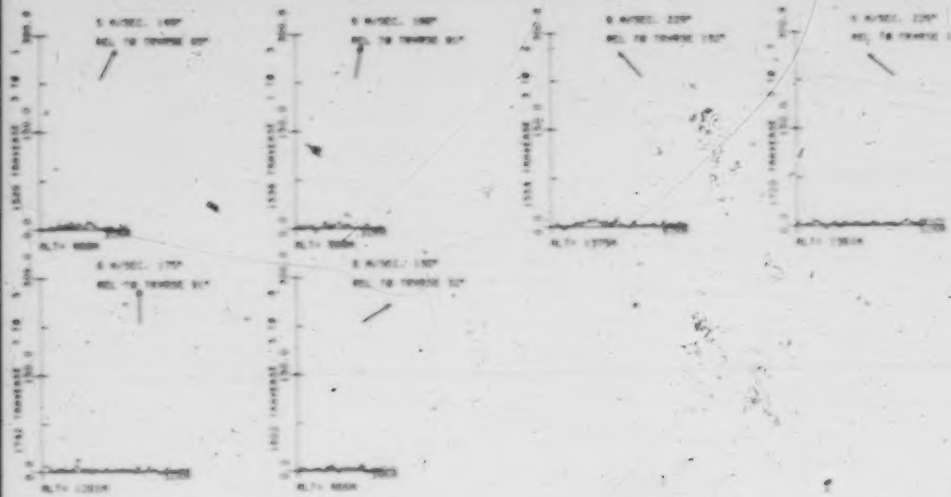
82 IN P.P.B.

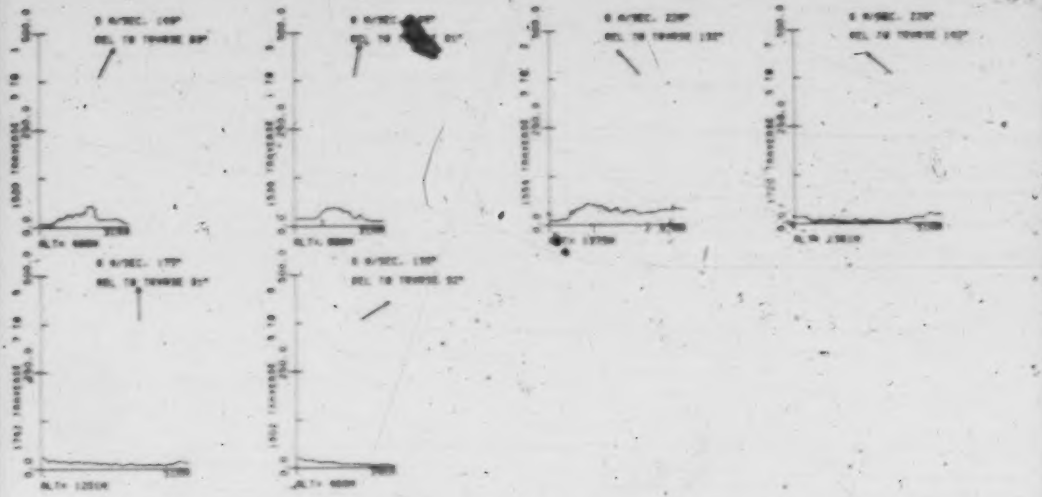
MAP 10











SO2 IN P.P.B.

MAP 18

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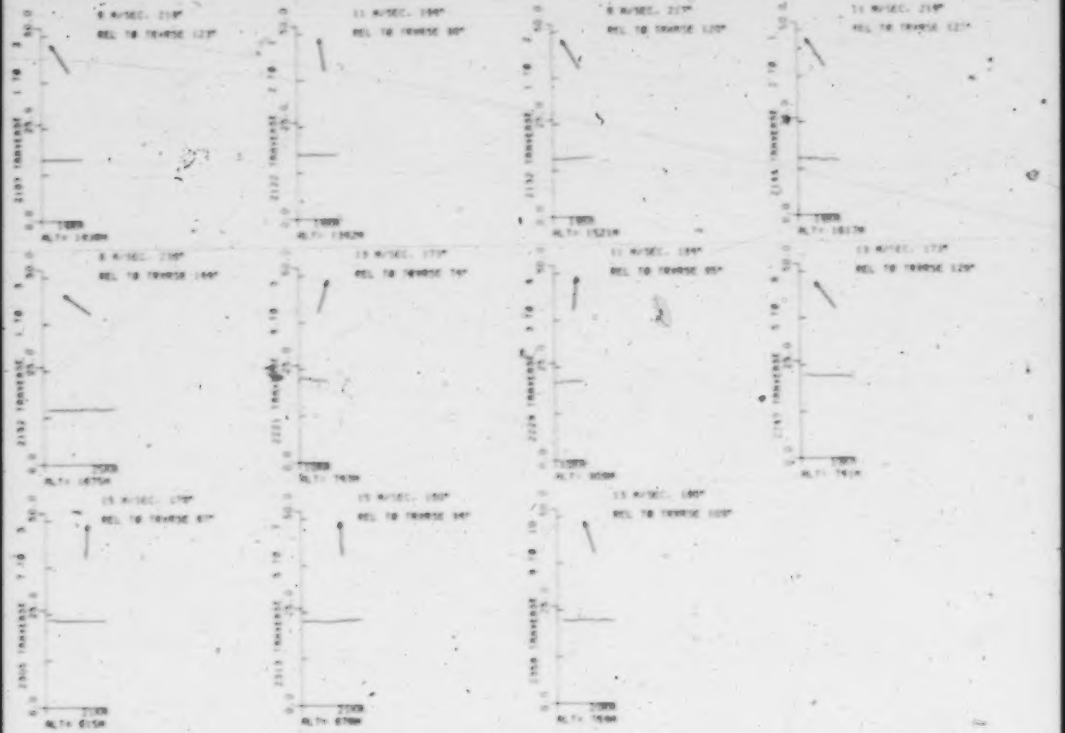
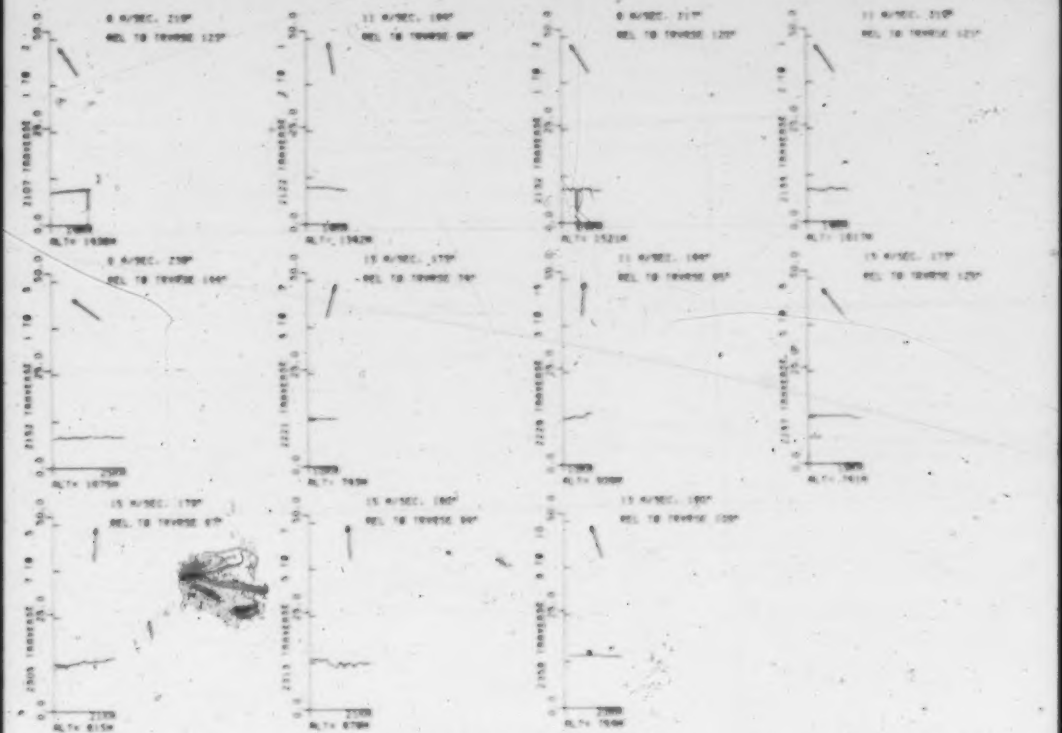
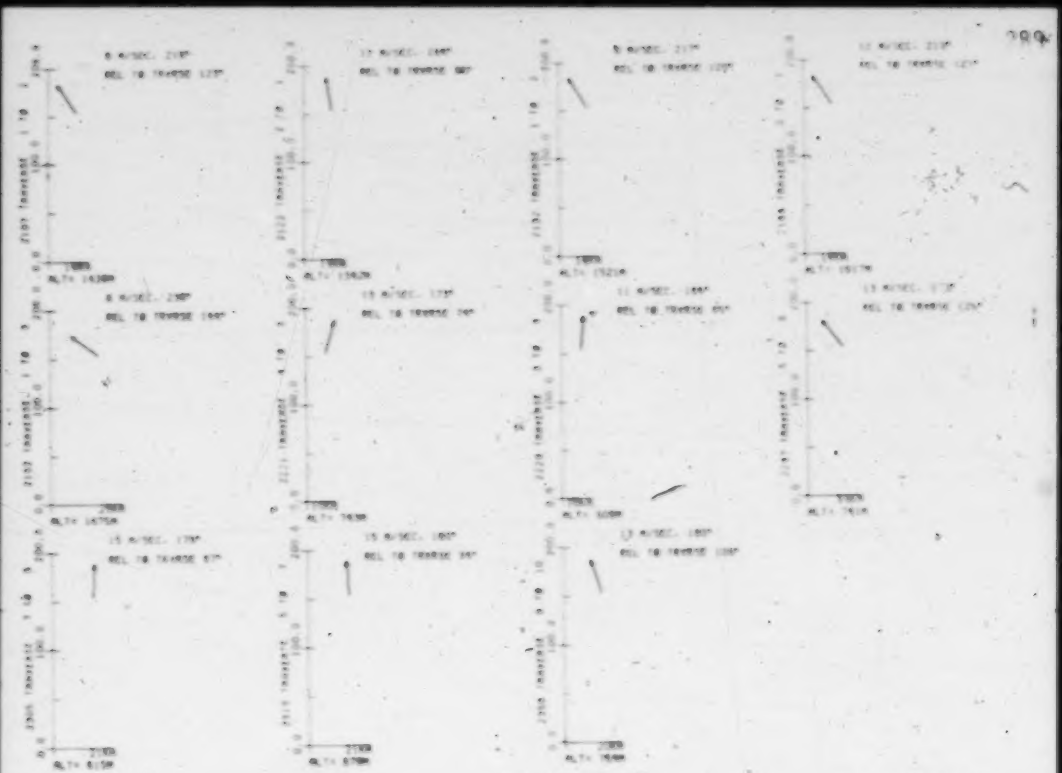


TEMP IN DEGREES C

MAP 11

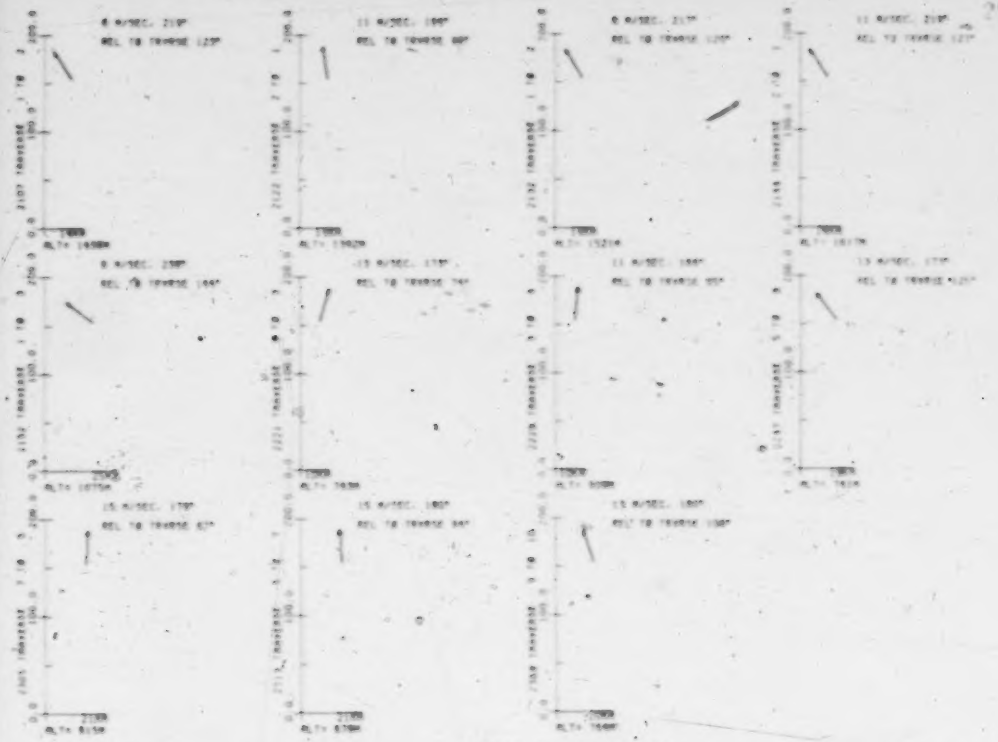


MAP 11



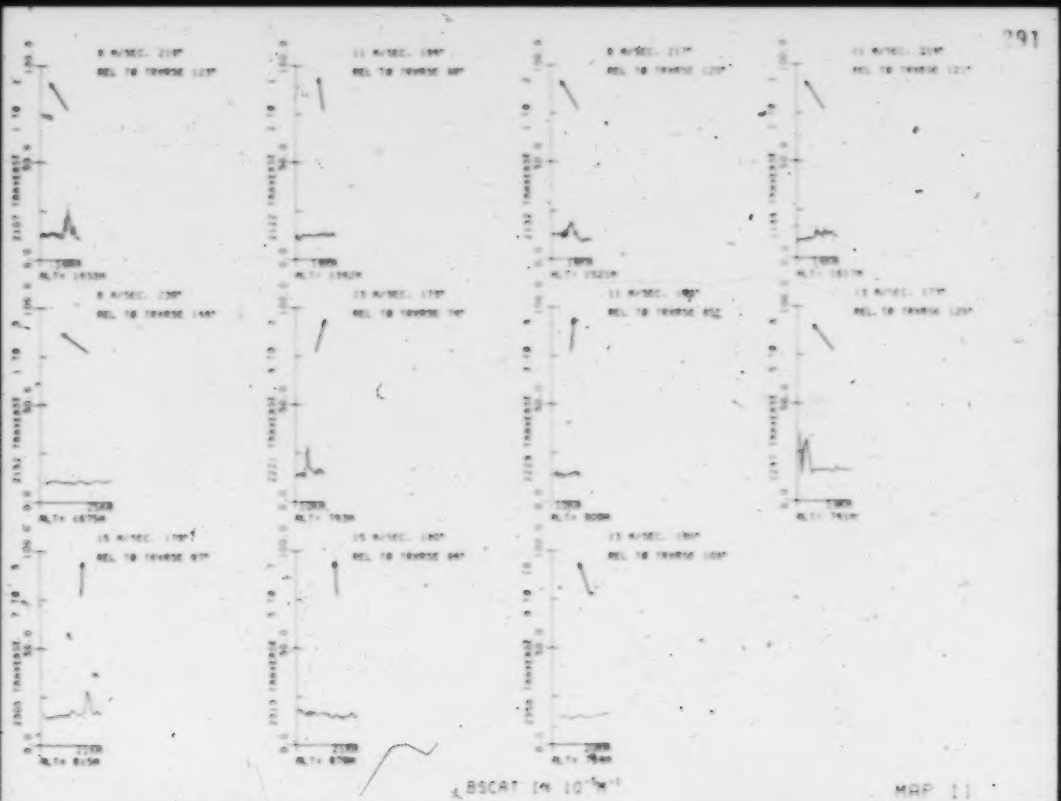
CNC IN $10^3 cm^{-3}$

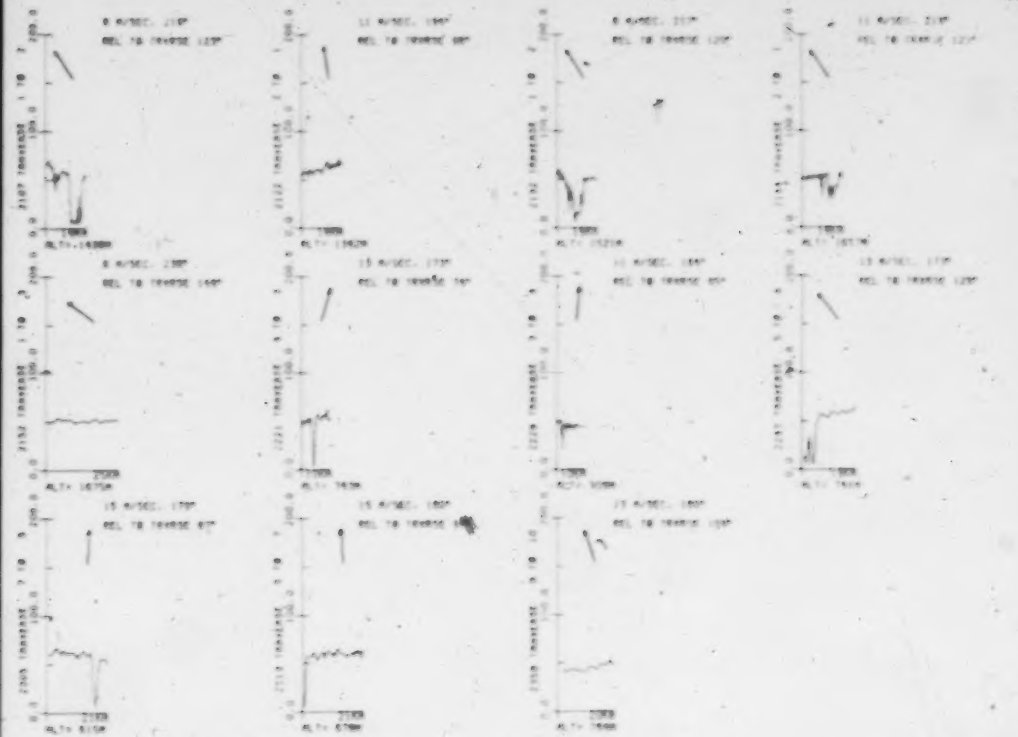
MAP 11



CHARGE IN MILLIVOLTS

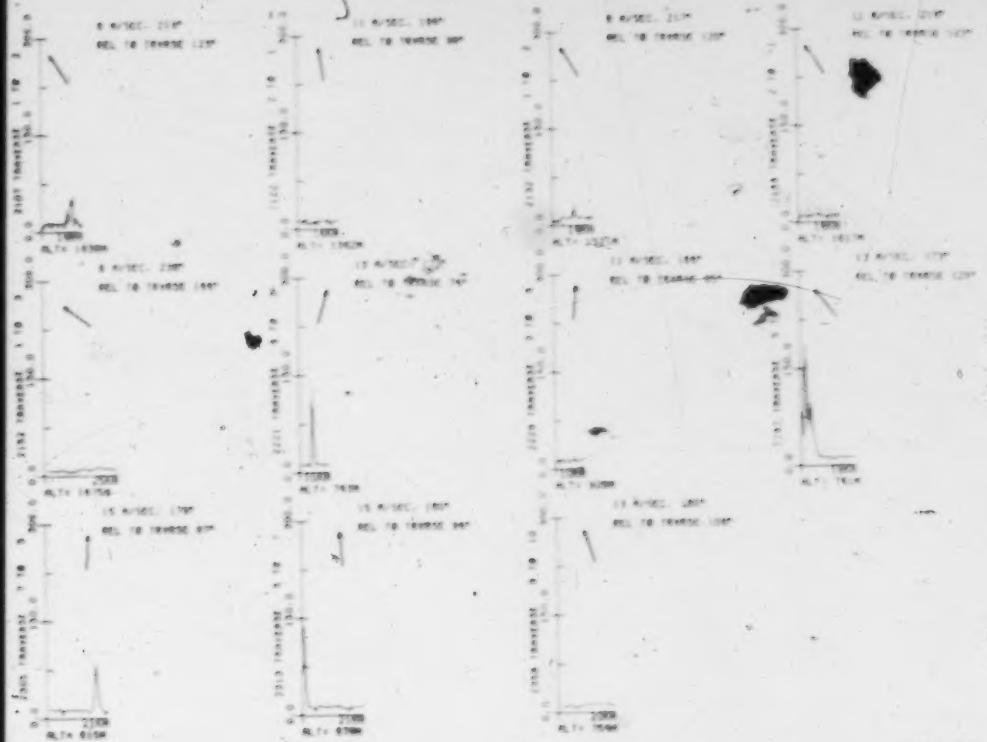
MAP 11


BSCAT [IN 10⁻⁶m⁻¹]
MAP 11



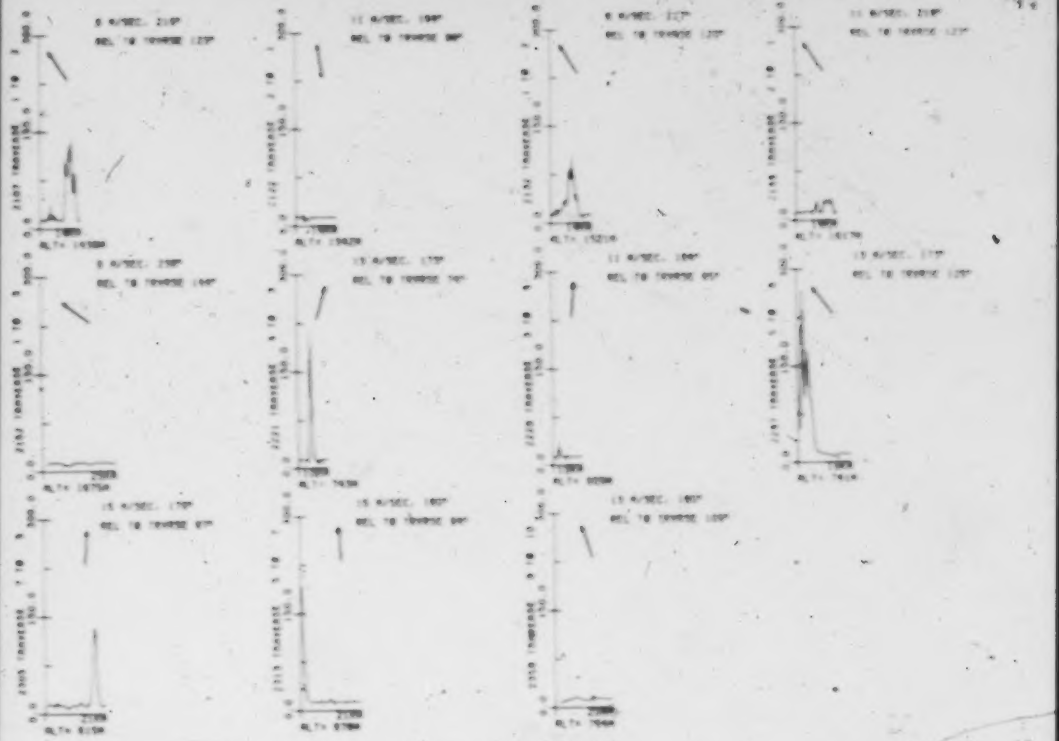
83 IN P.P.B.

MAP 11

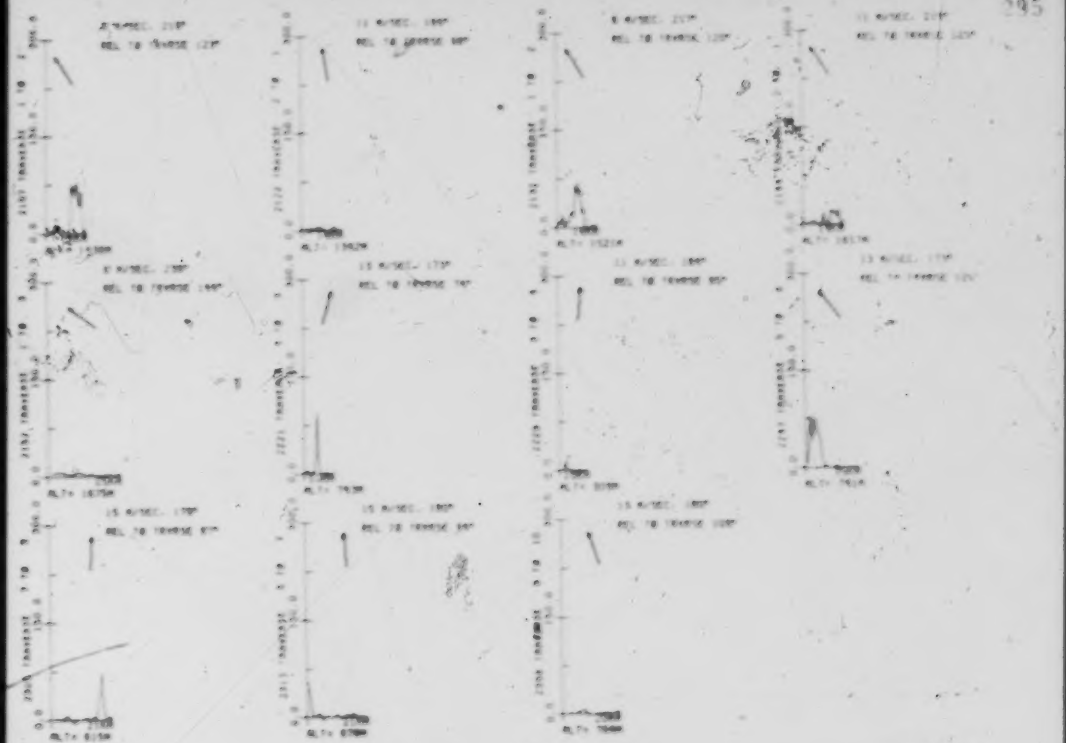


NB IN P.P.B.

MAP 11

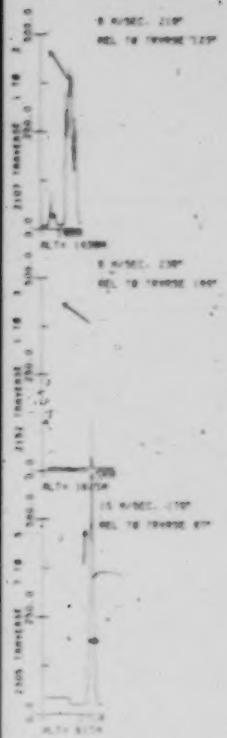


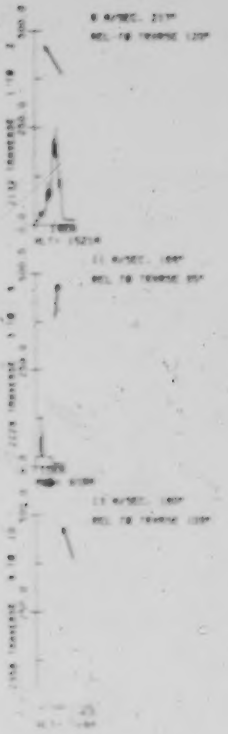
NOX IN P.P.B.

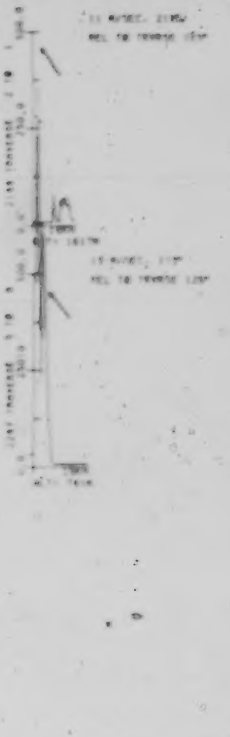


NO2 IN P.P.B.

MAP







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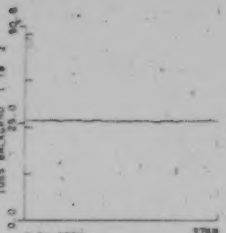
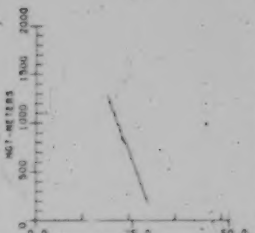
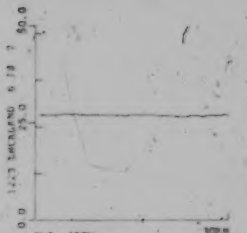
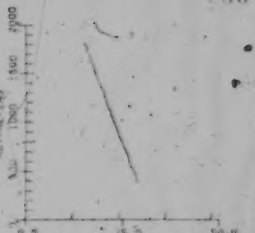
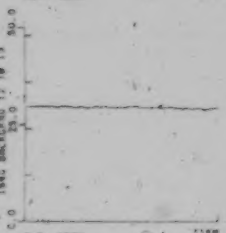
MAP 10

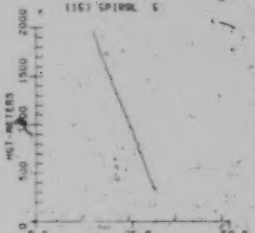


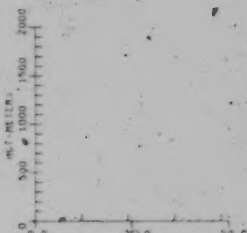


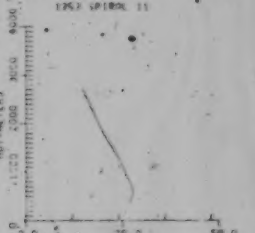


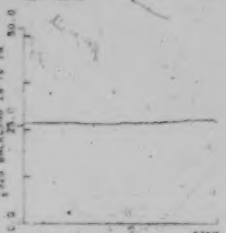


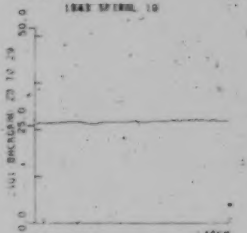






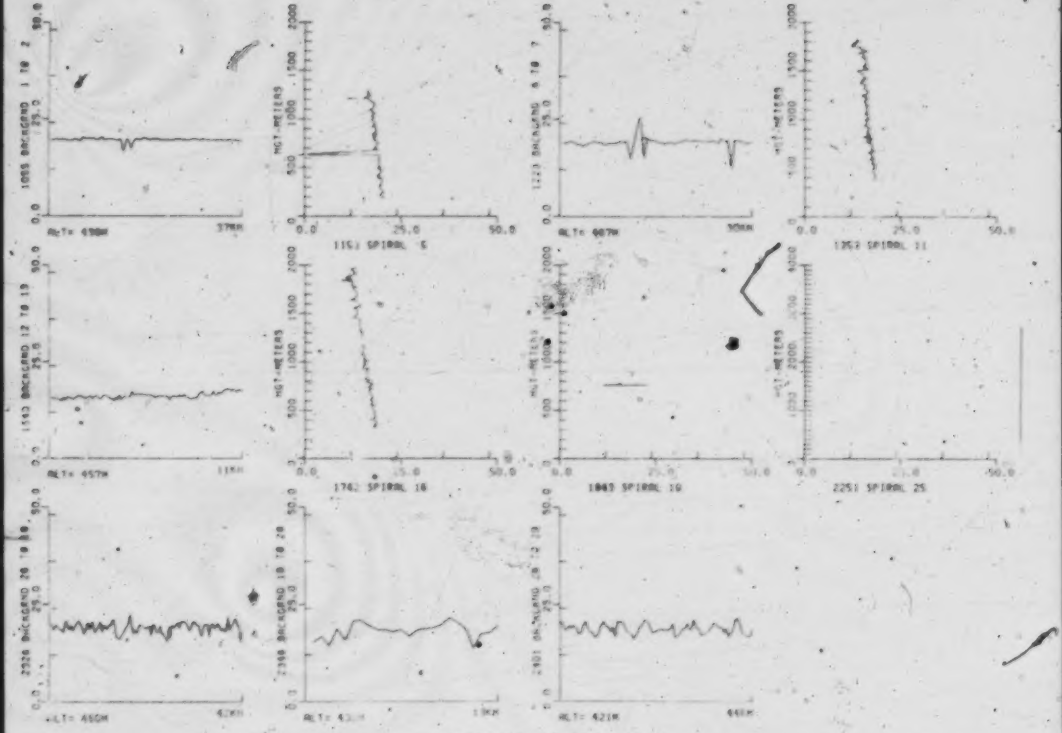


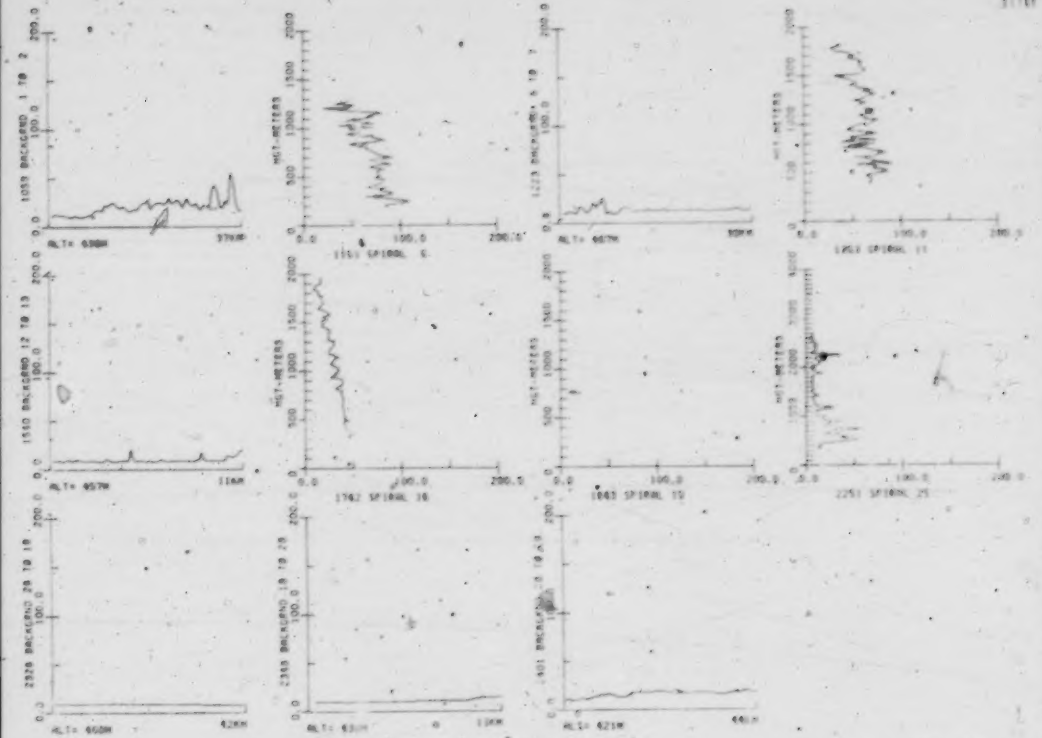




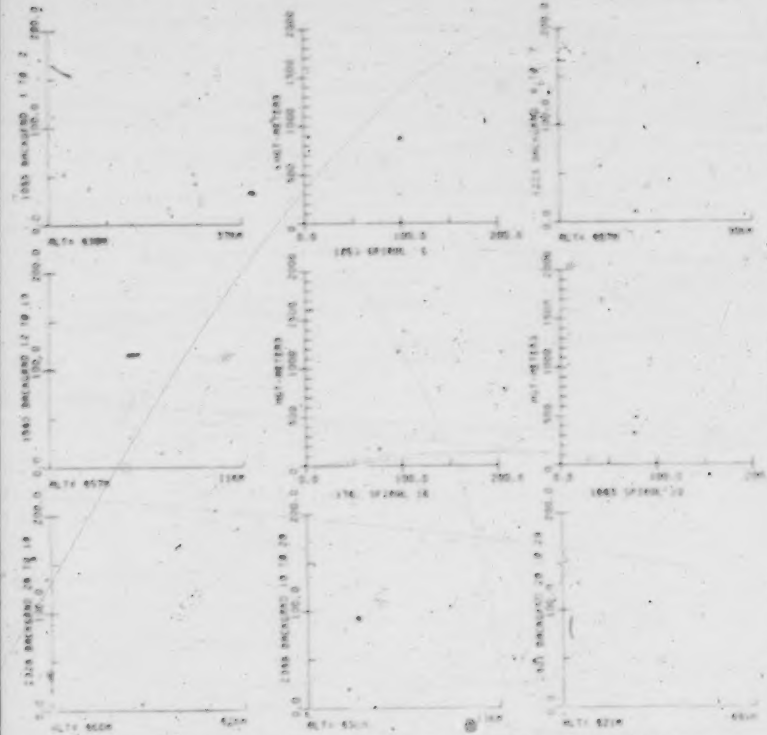
TEMP IN DEGREES C

MAP 1


1115 SPIRAL 5
1352 SPIRAL 11
1742 SPIRAL 18
1843 SPIRAL 19
2251 SPIRAL 25
DEWPOINT IN DEGREES C
MAP 10

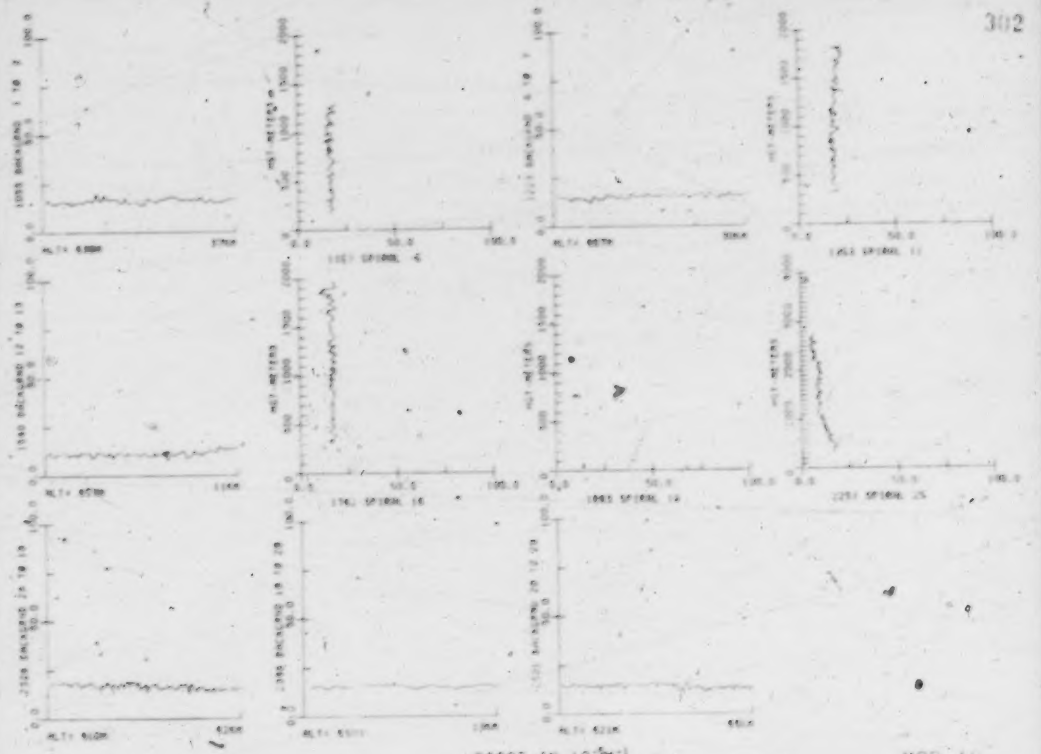

1053 BACKGRND 1 TO 2
ALT= 930M
370M
1151 SPIRAL 5
1229 BACKGRND 5 TO 7
ALT= 667M
80M
1451 SPIRAL 11
1550 BACKGRND 12 TO 13
ALT= 957M
116M
1742 SPIRAL 16
1843 SPIRAL 19
2251 SPIRAL 25
2326 BACKGRND 20 TO 18
ALT= 660M
428M
2365 BACKGRND 18 TO 20
ALT= 631M
136M
2451 BACKGRND 20 TO 23
ALT= 621M
441M
HGT-METERS
CNC IN $10^3 CM^{-3}$

MAY 15



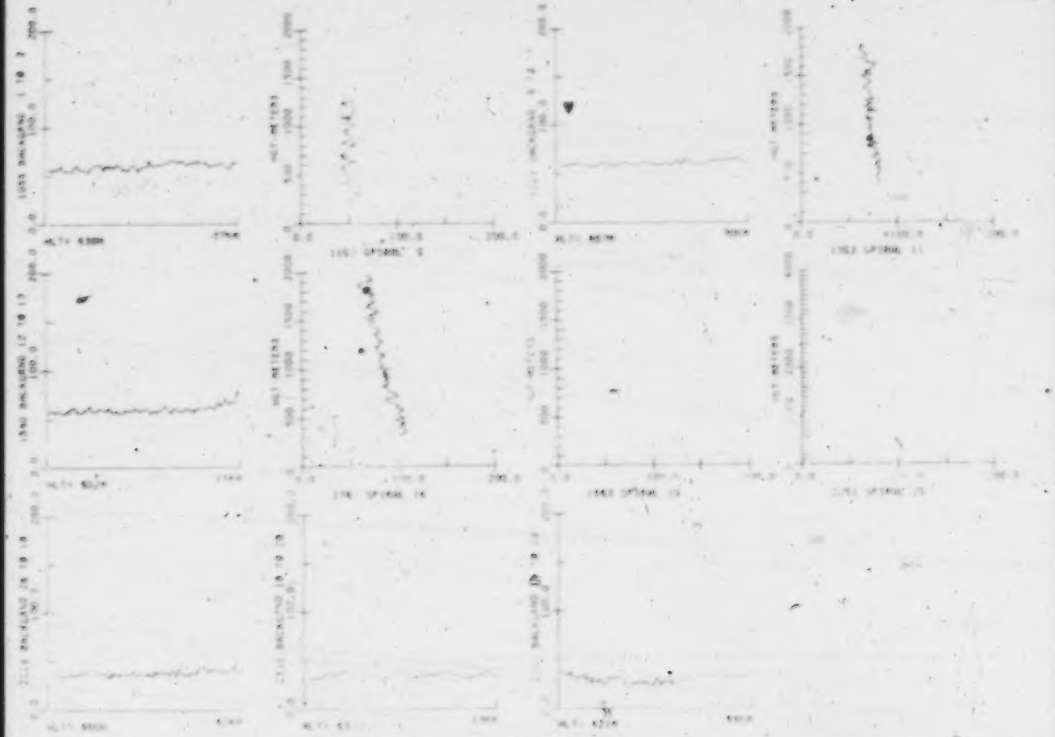
CHARGE IN MILLIVOLTS

MAP 10

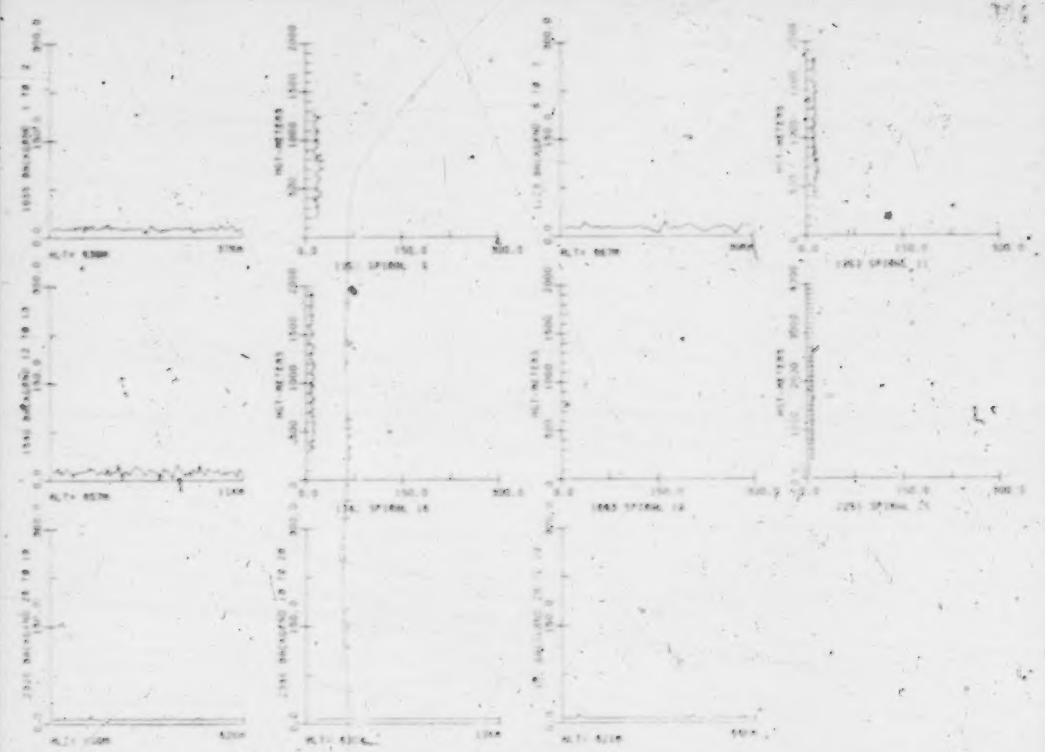


BSCAT IN $10^{-6}m^{-1}$

MAP 10

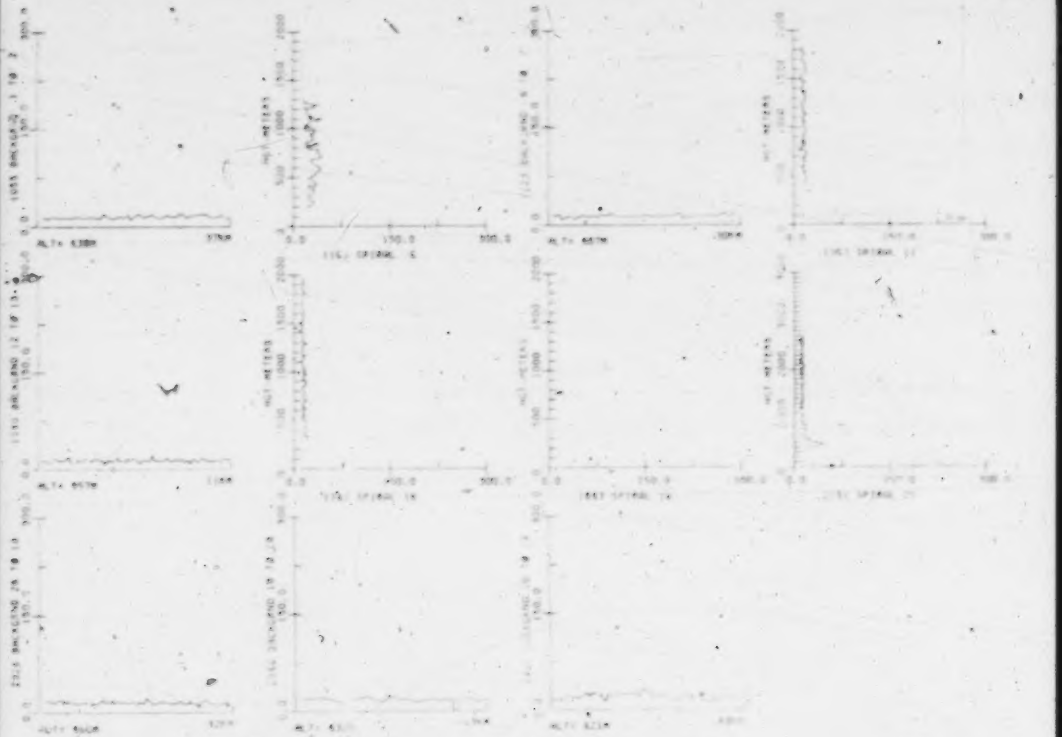


BS IN P.P.B.



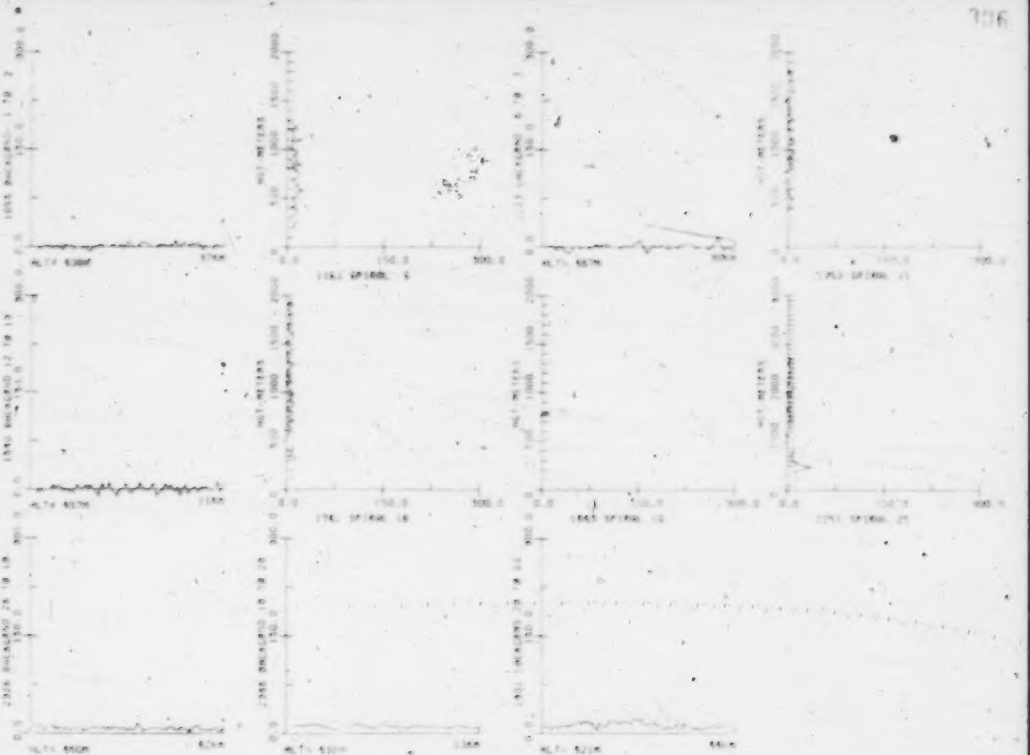
NP IN P.P.B.

MAP 10



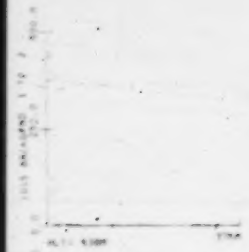
NOT IN P.P.B.

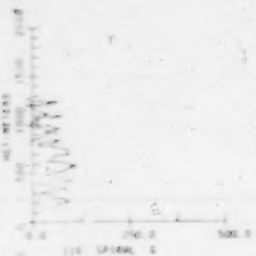
MAE 10

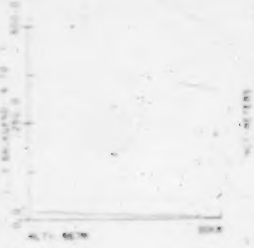


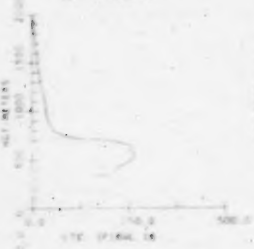
NOT IN F.P.B.

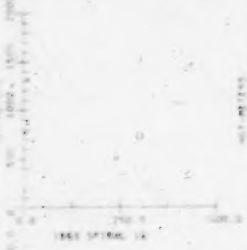
MAP 1

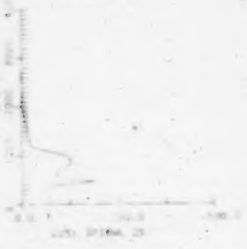












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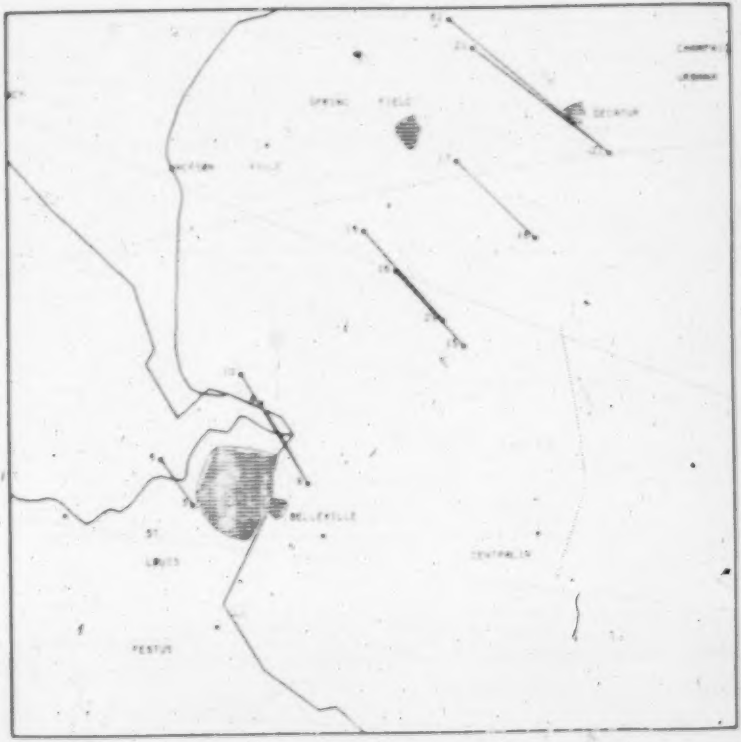
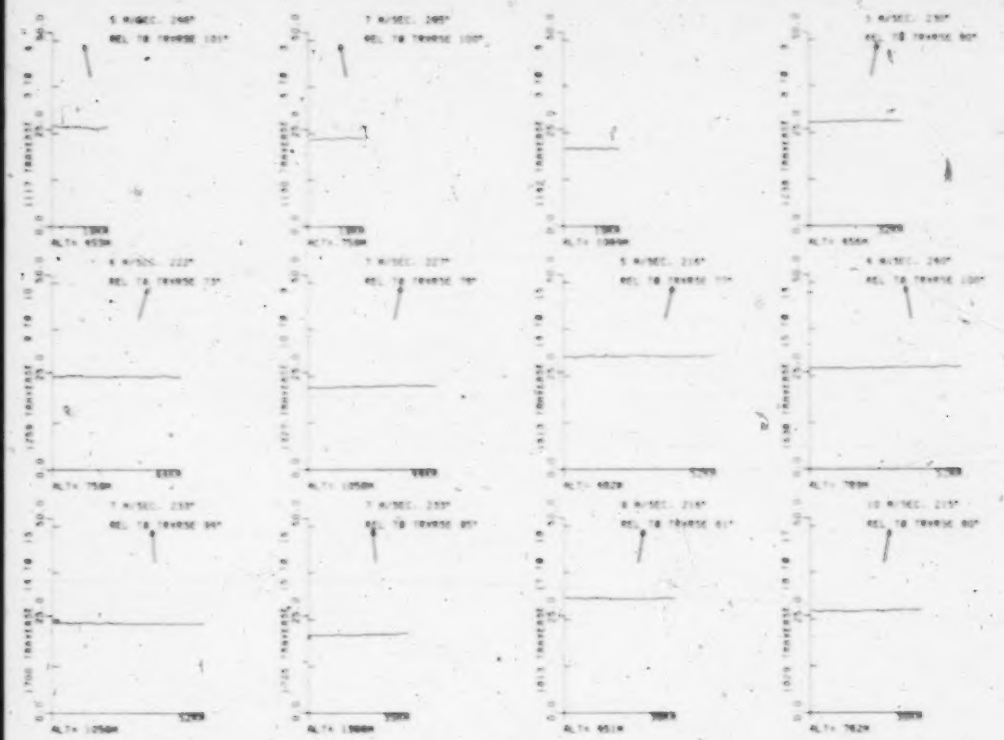
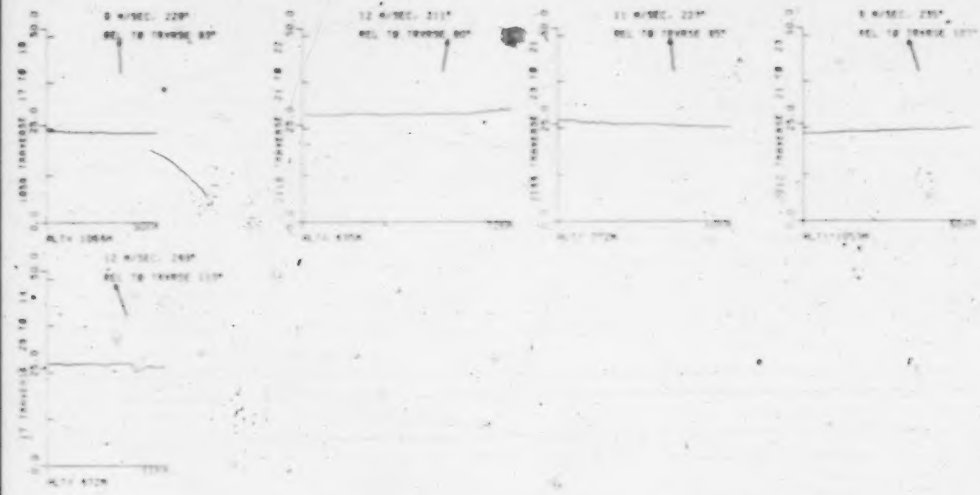
MAP 12





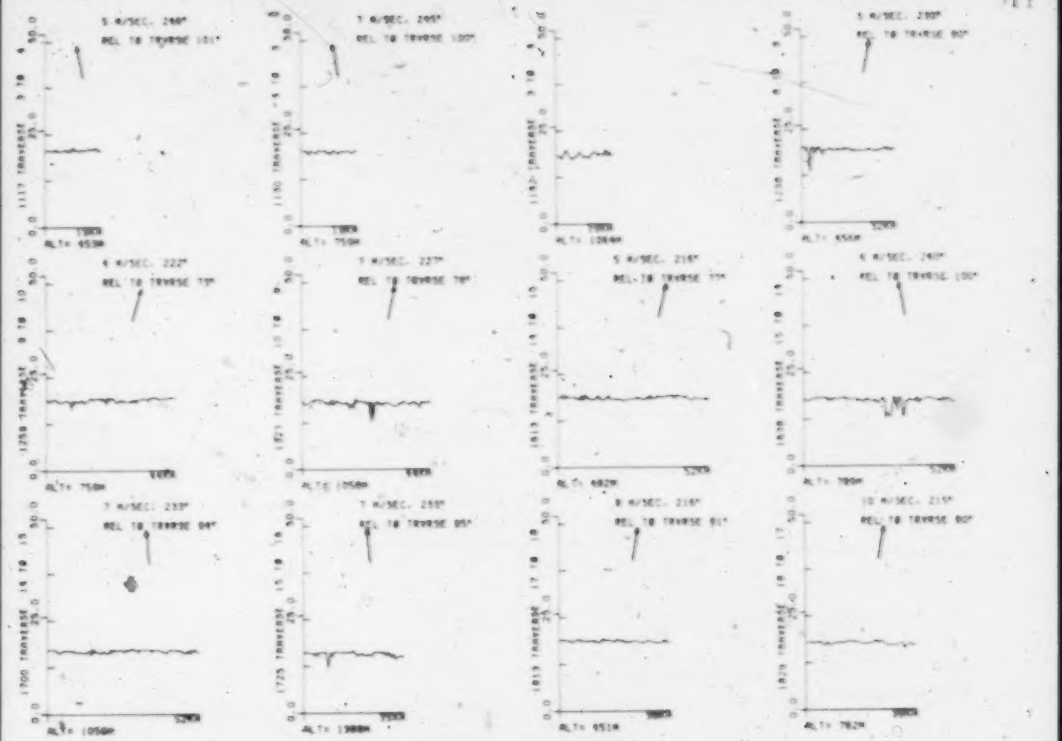
TEMP IN DEGREES C

MAP 12



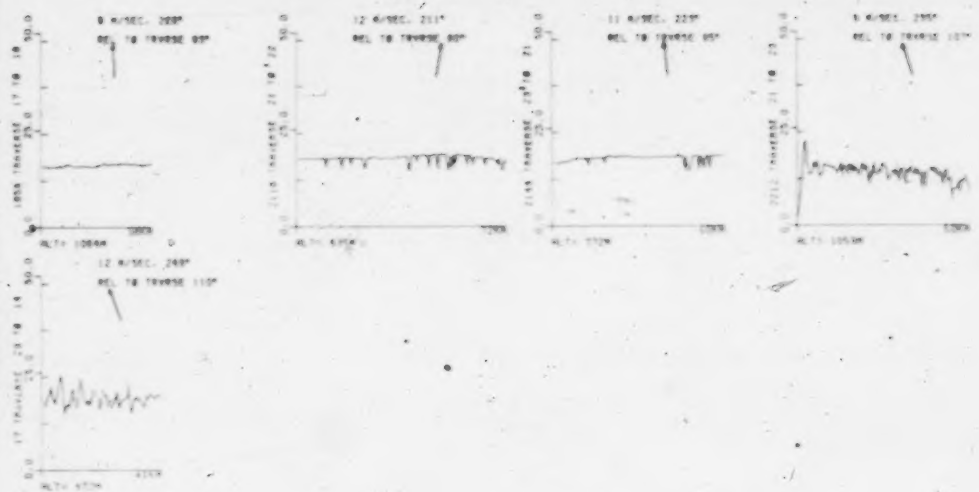
TEMP IN DEGREES °C

MAP 1



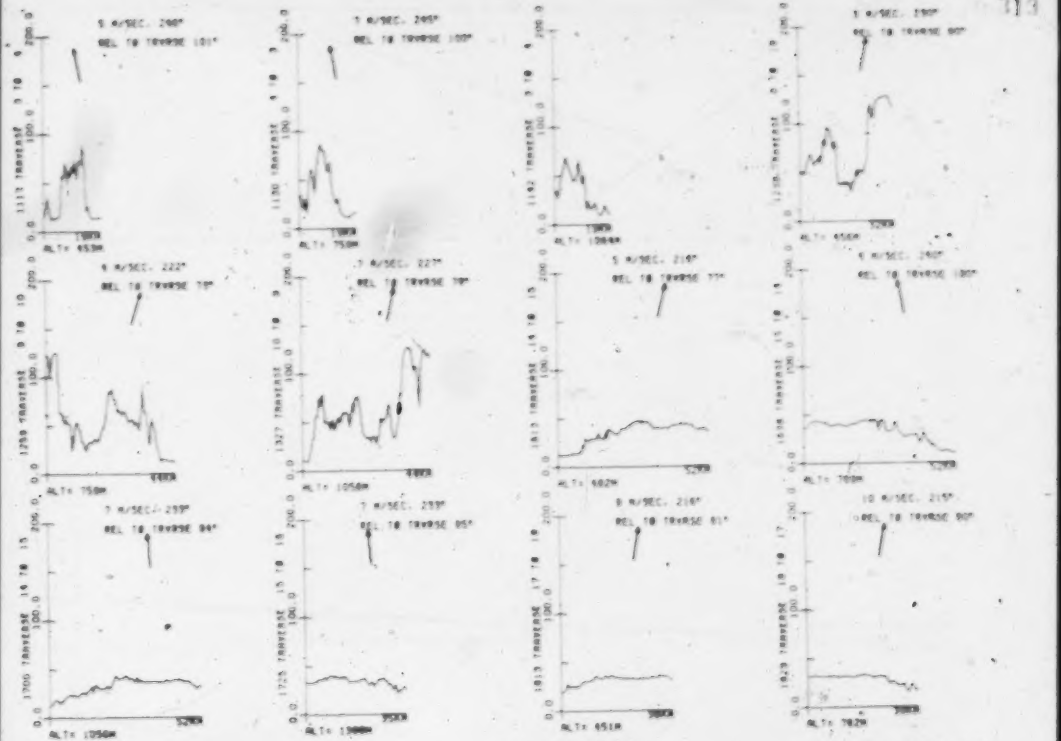
DEWPOINT IN DEGREES C

MAP 12



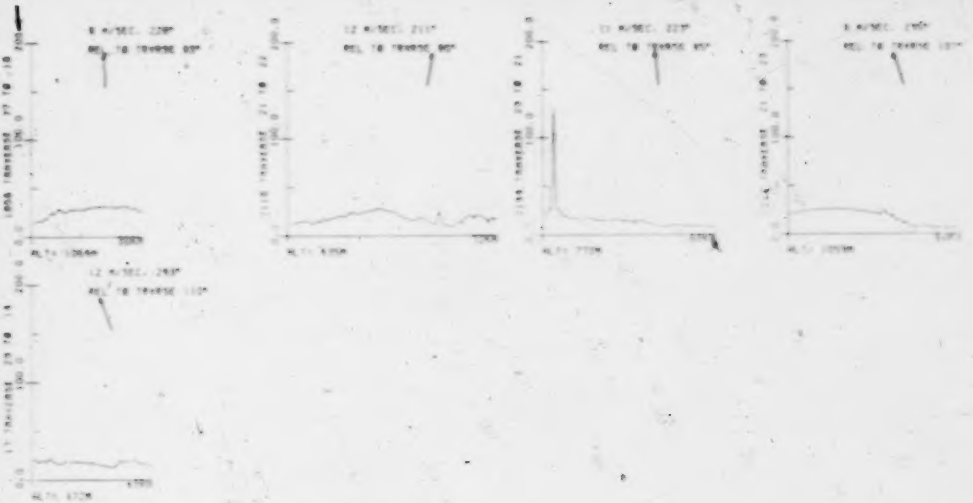
DEWPOINT IN DEGREES C

MAP 12



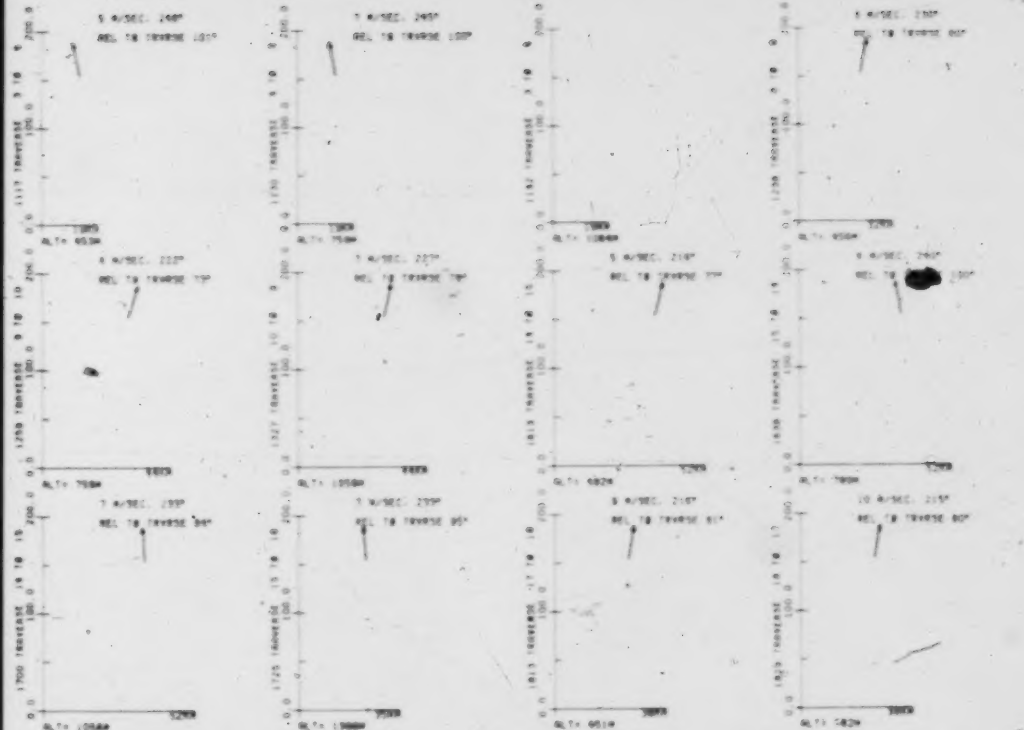
CNC IN $10^3 CM^{-3}$

MAP 12



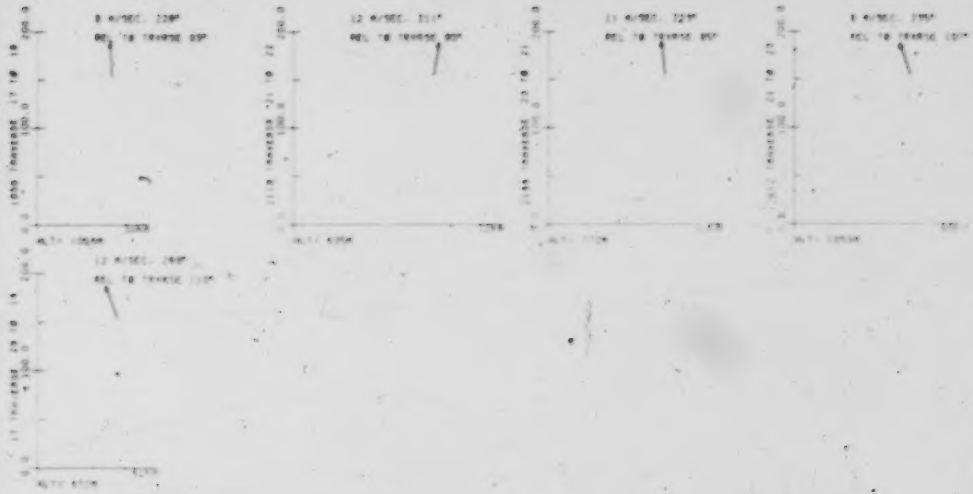
CNC IN $10^3 cm^{-3}$

MGP



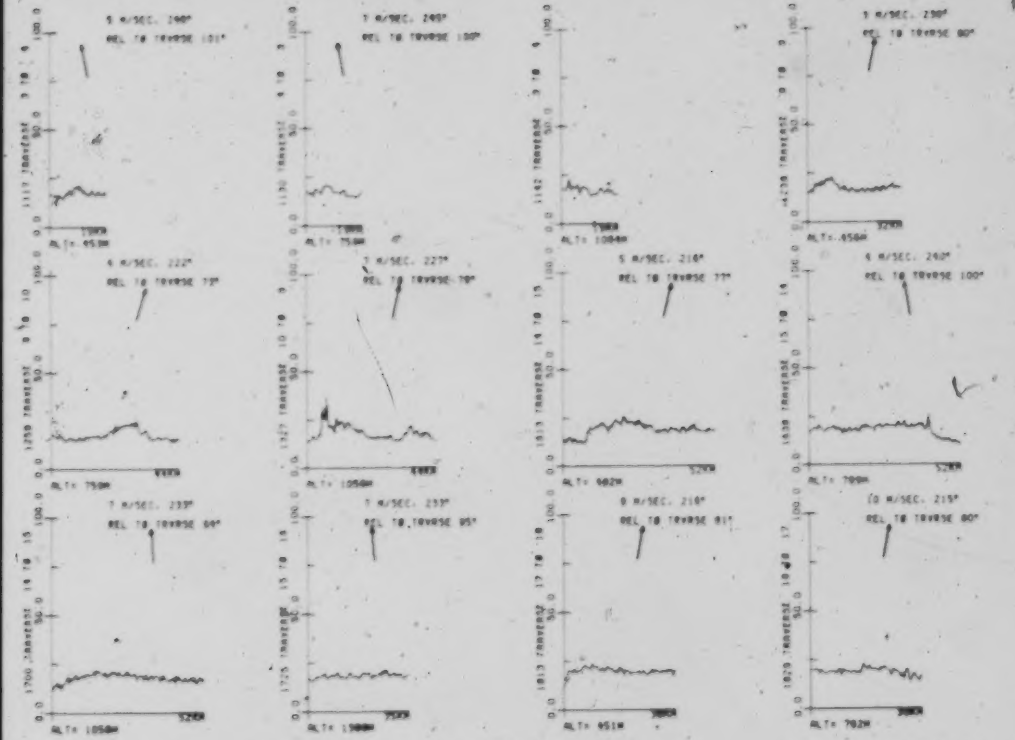
CHARGE IN MILLIVOLTS

MAP 12



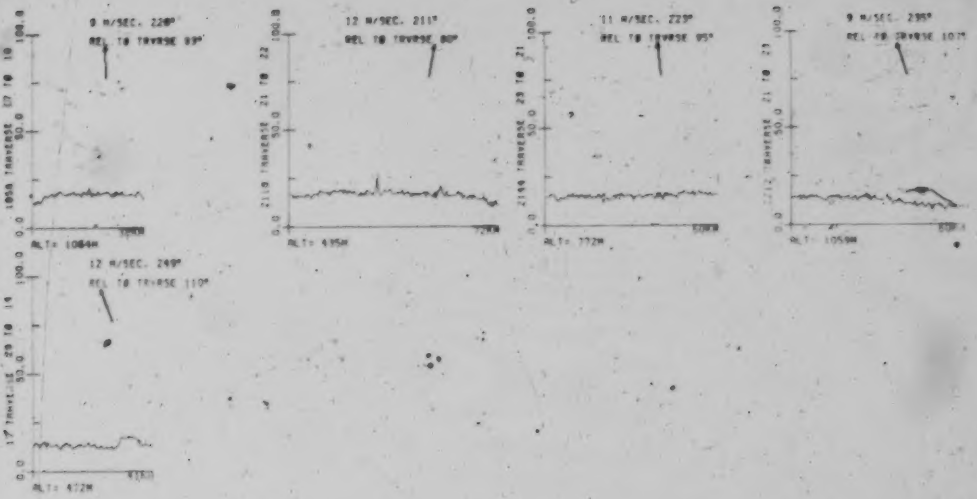
CHARGE IN MILLIVOLTS

MAP 12



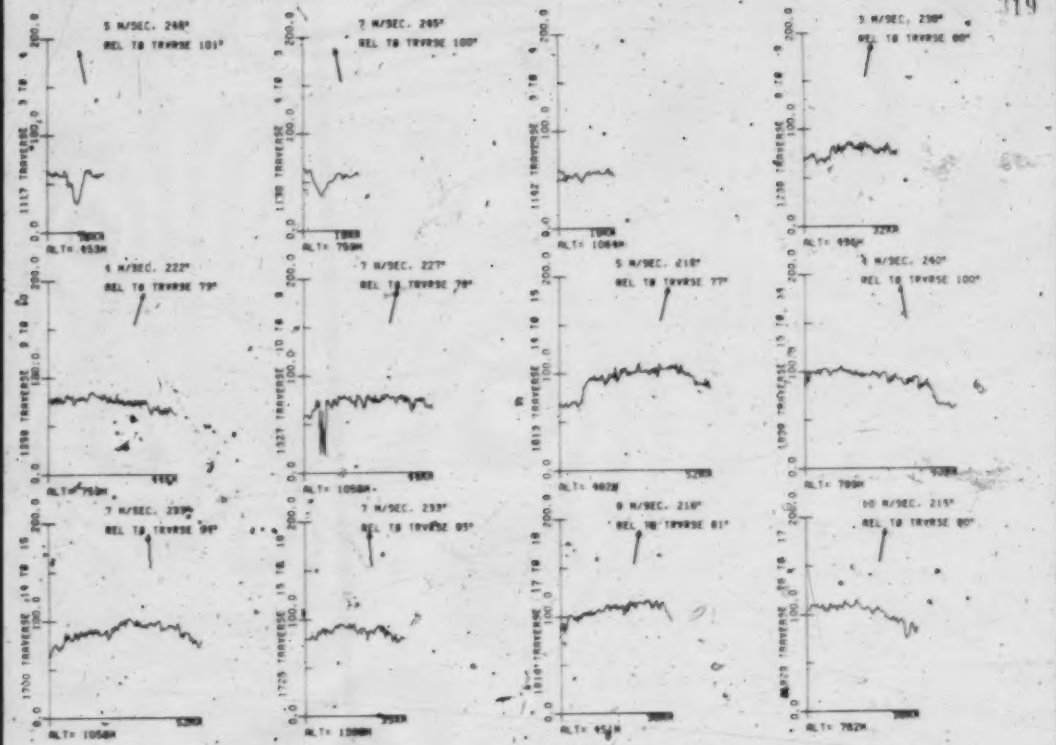
BSCAT IN $10^{-5}M^{-1}$

MAP 1



BSCAT, IN 10^{-5} M^{-1}

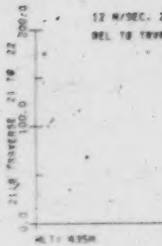
MAP 1



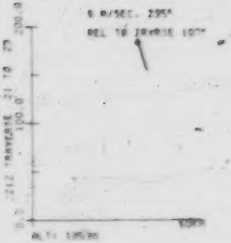
03 IN P.P.B.

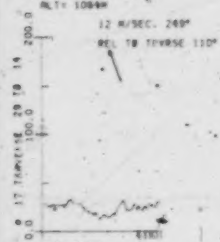
MAP 12

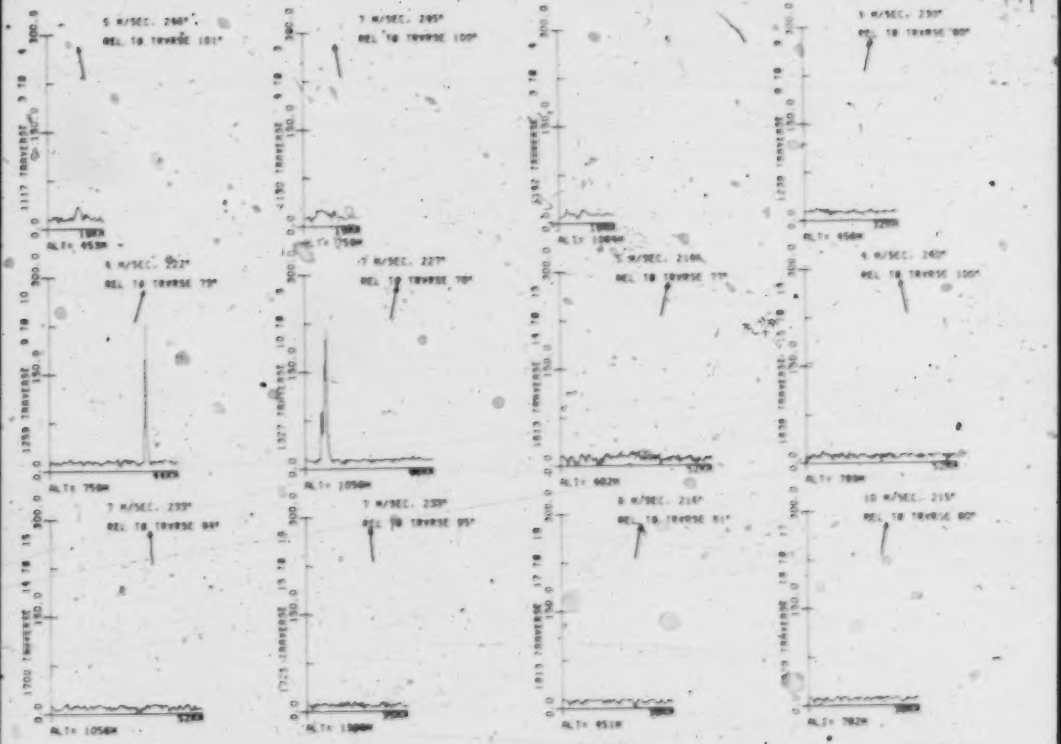
9 M/SEC. 220°
REL TO TRVRSE 83°
1850 TRAVERSE 17 TO 18
200.0
100.0
0.0
ALT= 1084M


12 M/SEC. 211°
REL TO TRVRSE 80°
2130 TRAVERSE 21 TO 22
200.0
100.0
0.0
ALT= 635M

11 M/SEC. 227°
REL TO TRVRSE 95°
2160 TRAVERSE 20 TO 21
200.0
100.0
0.0
ALT= 772M

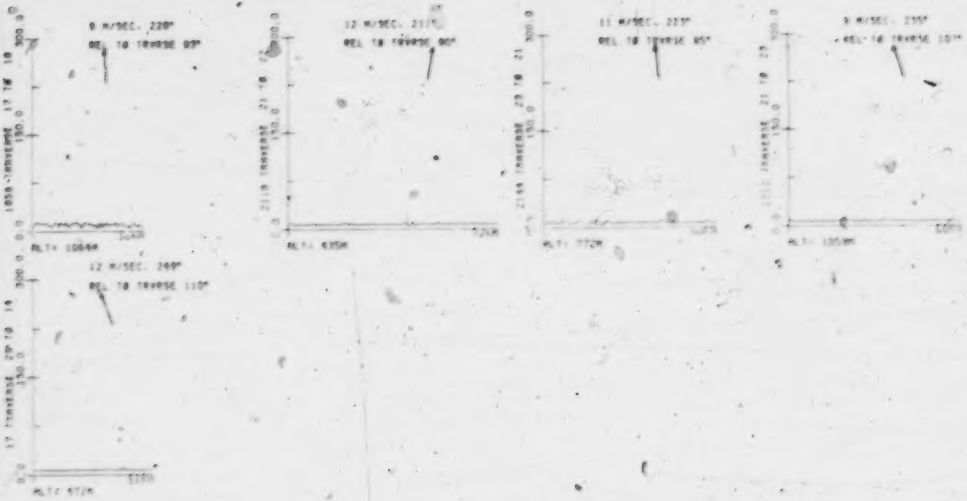

9 M/SEC. 295°
REL TO TRVRSE 107°
2112 TRAVERSE 21 TO 22
200.0
100.0
0.0
ALT= 1053M


12 M/SEC. 249°
REL TO TRVRSE 110°
0 17 TRAVERSE 20 TO 14
200.0
100.0
0.0
ALT= 412M



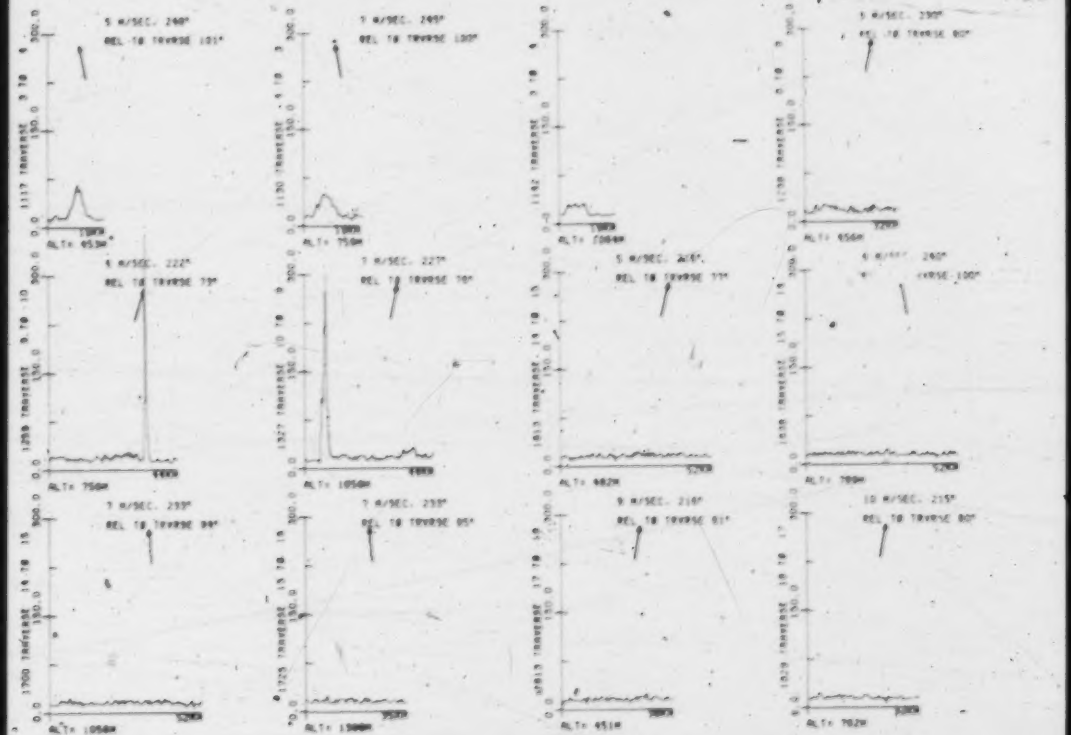
NO IN P.P.B.

MAP 12



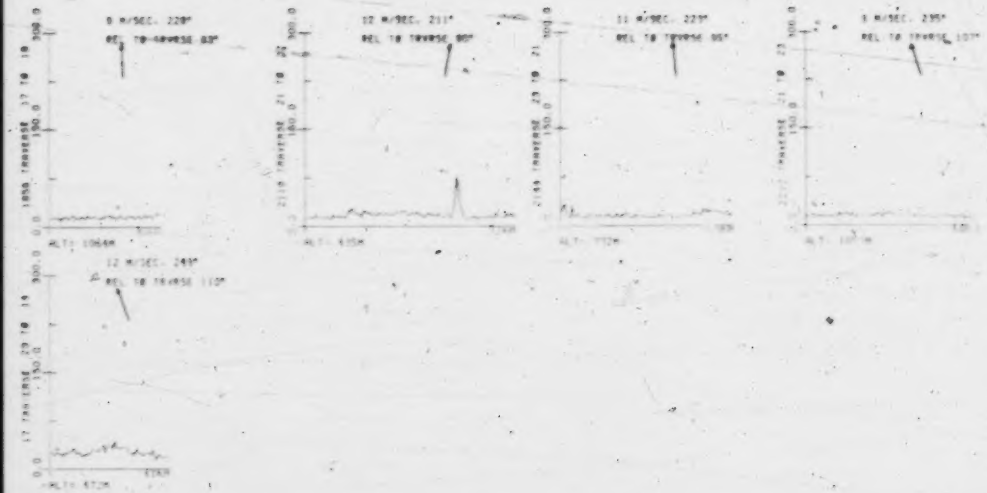
NØ IN P.P.B.

MAP 12



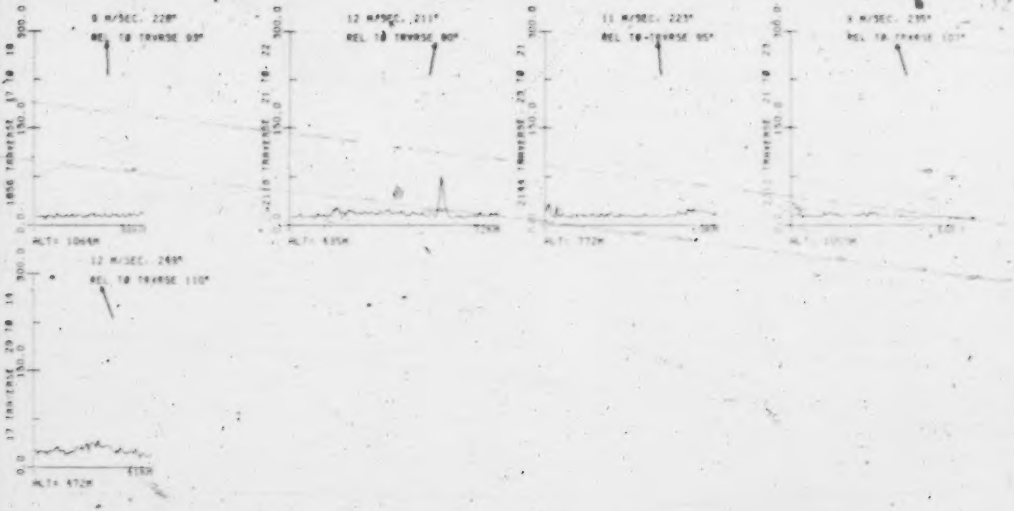
NOX IN P.P.B.

MAP 12



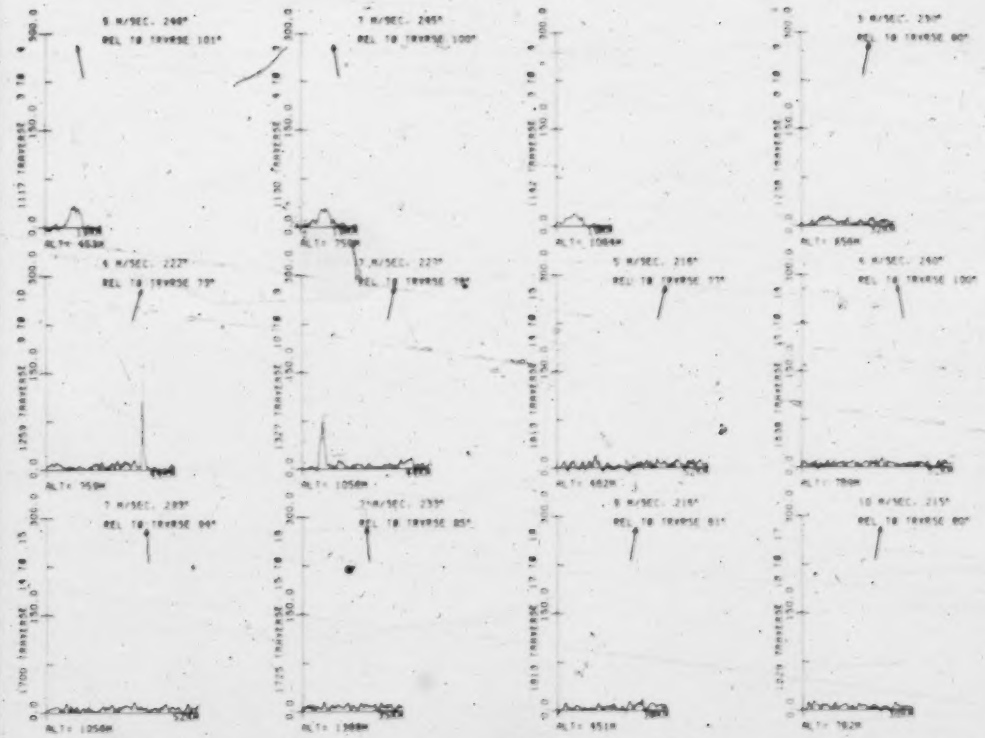
NOX IN P.P.B.

MAP 1



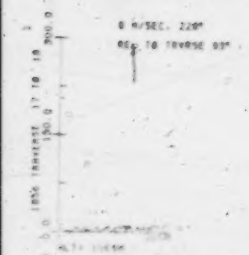
NØX IN P.P.B.

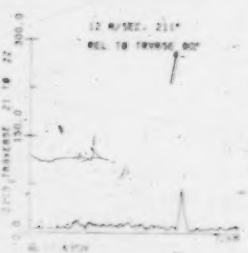
MAP 12

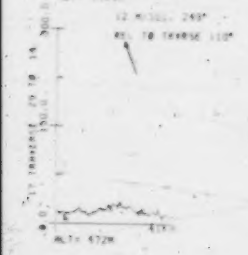


NØ2 IN P.P.B.

MAP 12

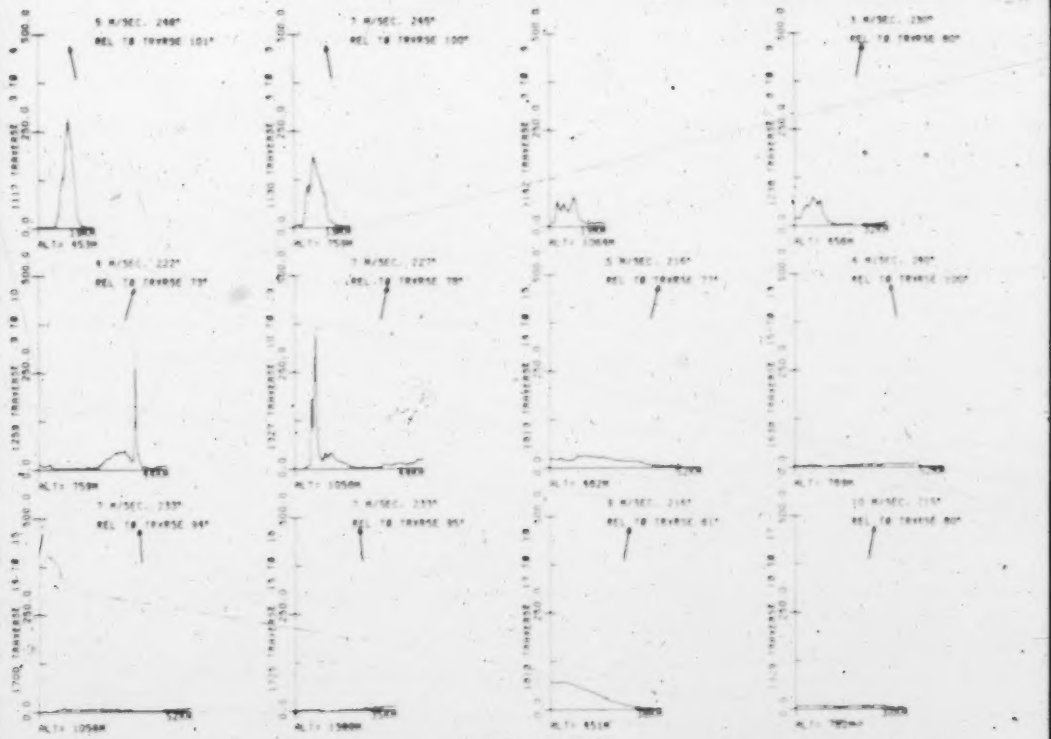


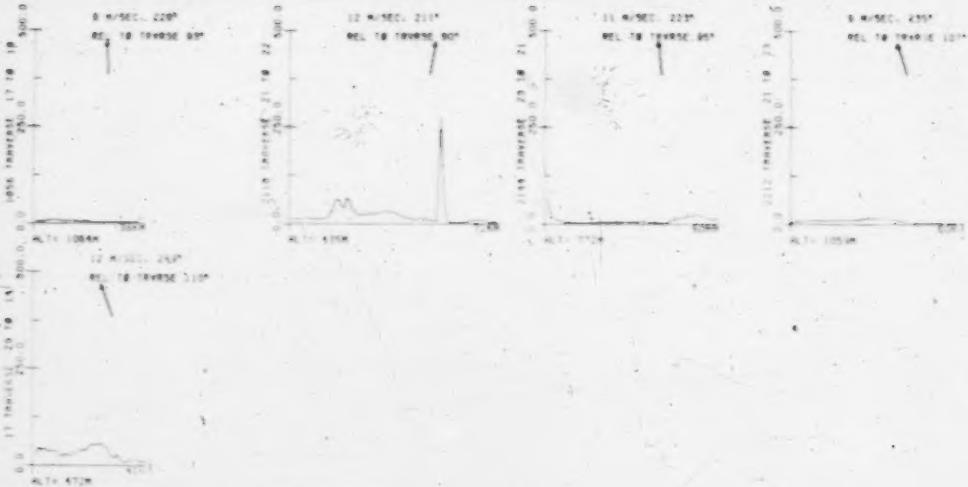




N82 IN P.P.B.

MAP 12


SO2 IN P.P.B.



S02 IN P.F.B.

MAF 1

62572376

MAP 11

TEMP IN DEGREES C

MAP 41

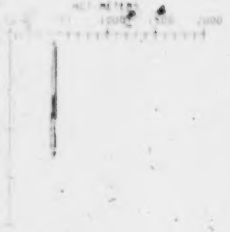
DEWPOINT IN DEGREES K

MAP 11

HGT-METERS
0 1000 1500 2000

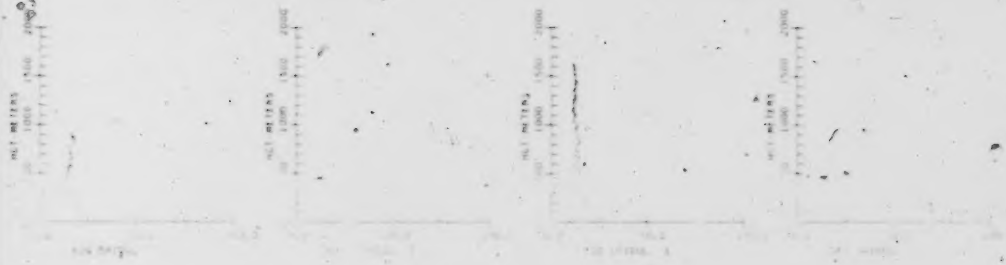
HGT-METERS
0 1000 1500 2000

HGT-METERS
0 1000 1500 2000


HGT-METERS
0 1000 1500 2000

CHARGE IN MILLIVOLTS

MAP 11

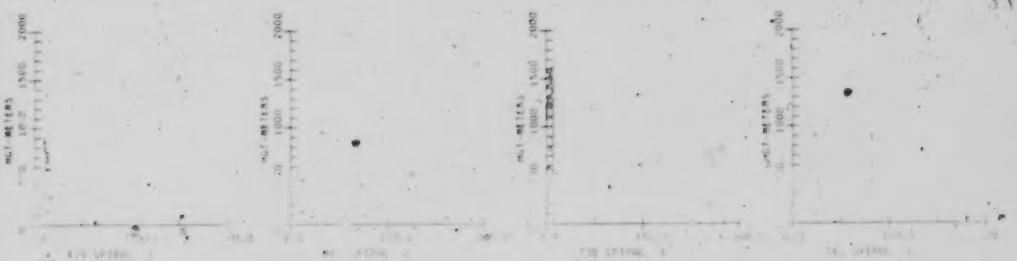


BSCAT IN $10^{-6}M^{-1}$

MAP 11

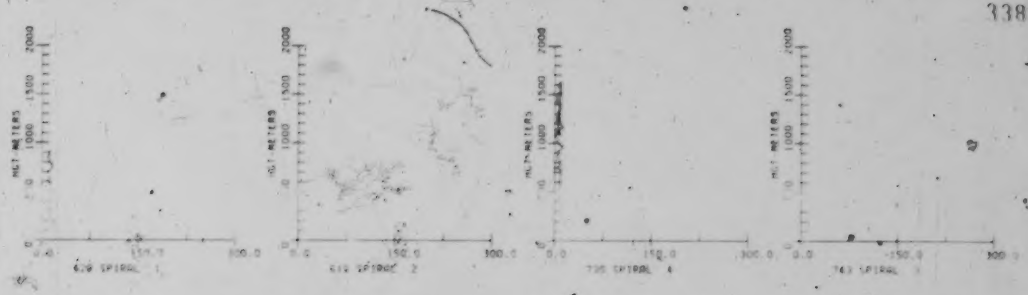
83 IN P.P.B.

MAP 11



NE IN P.P.B.

MAP 11

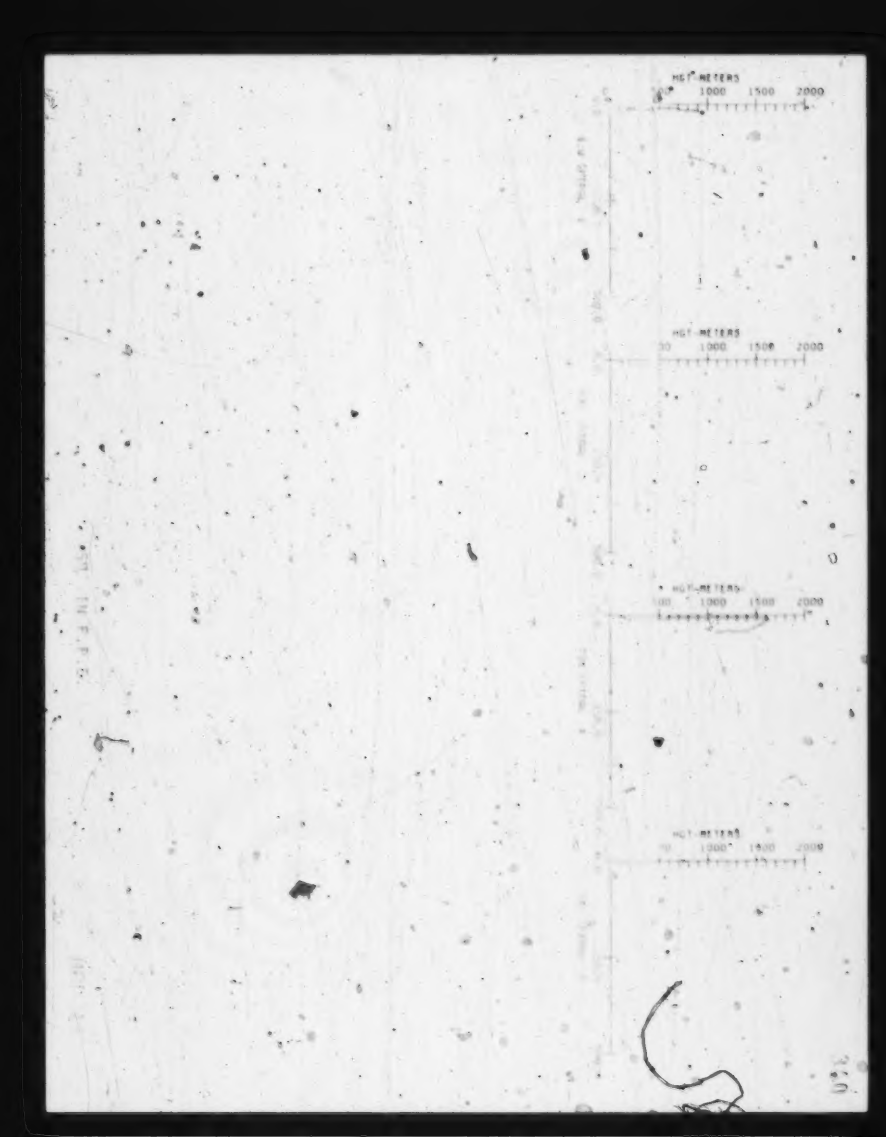


NØY IN P.P.B.

MAP 11

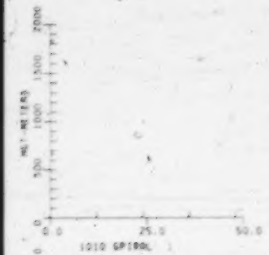
NO2 IN P.P.B.

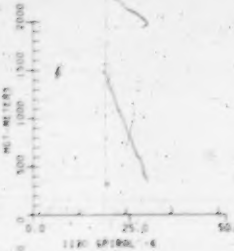
MAR 71

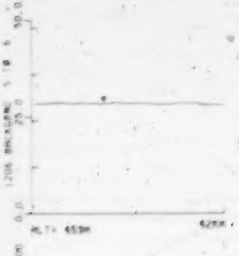

HGT-METERS
1000
1500
2000
HGT-METERS
1000
1500
2000
HGT-METERS
1000
1500
2000
HGT-METERS
1000
1500
2000

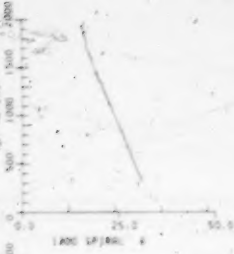
62672378

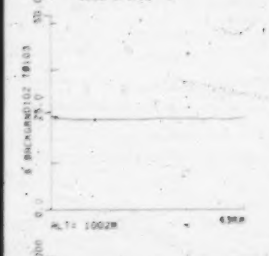
MAP 12

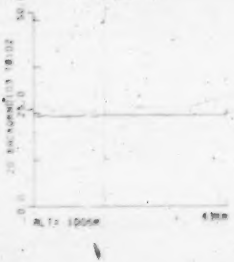


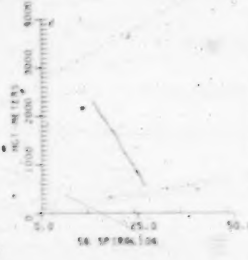


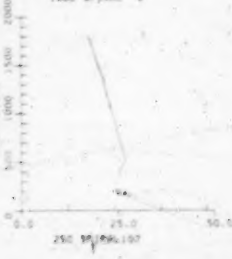


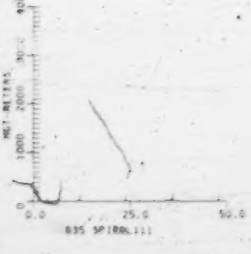










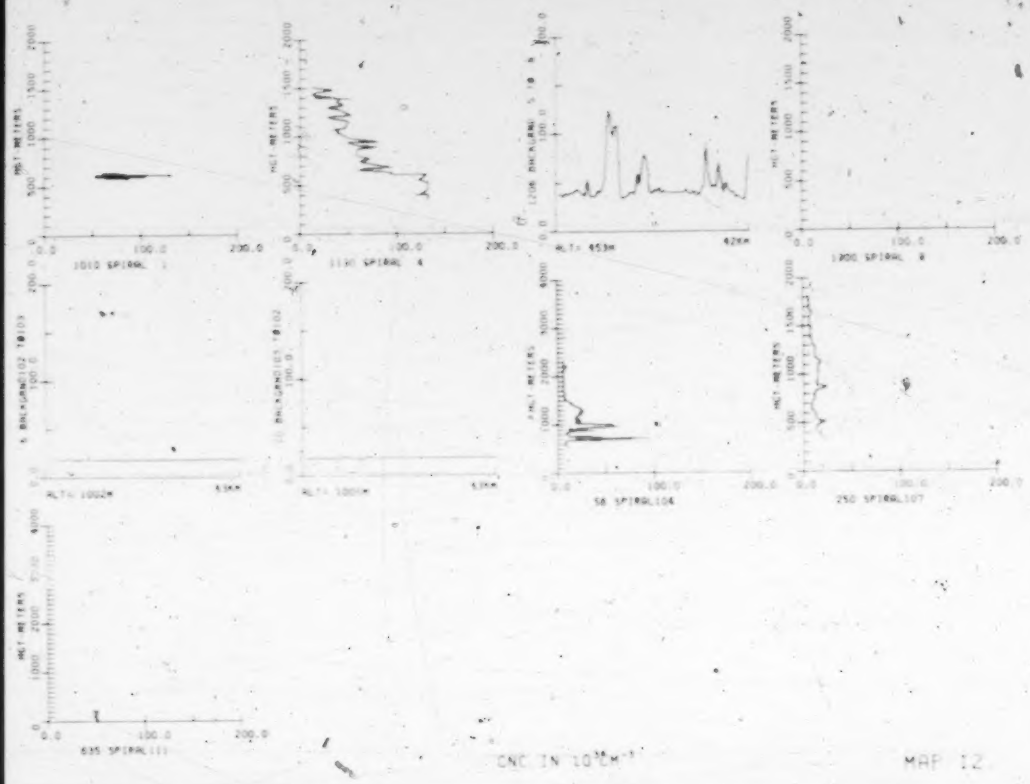


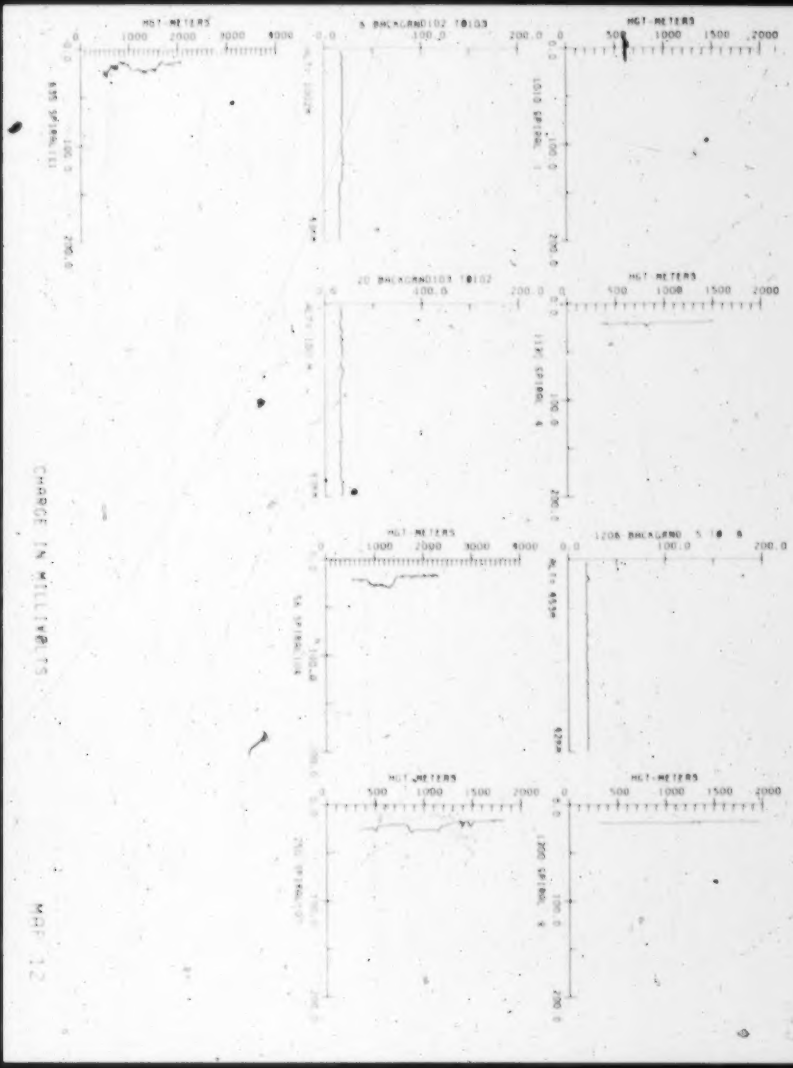
TEMP IN DEGREES C

MAP 12

DEWPOINT IN DEGREES C

MAP 12


MAP 12


HGT METERS
0
1000
2000
3000
4000
5 BKGRND102 T0103
0.0
100.0
200.0
HGT METERS
0
500
1000
1500
2000
20 BKGRND102 T0102
100.0
200.0
HGT METERS
0
500
1000
1500
2000
HGT METERS
0
1000
2000
3000
4000
120 BKGRND 5 10 0
0.0
100.0
200.0
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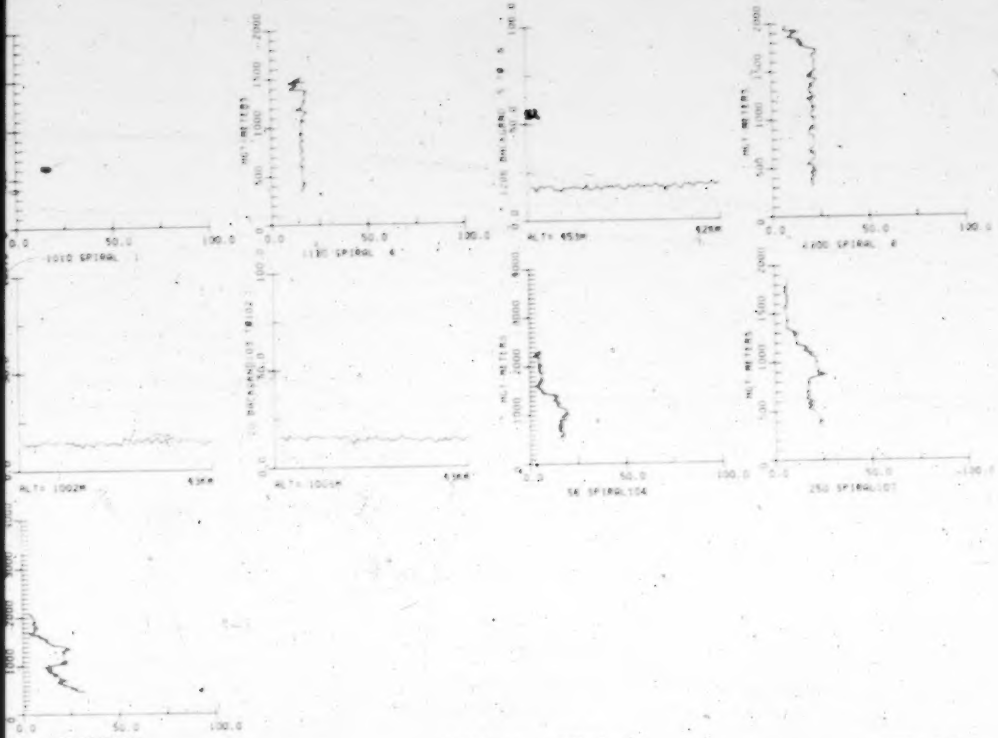
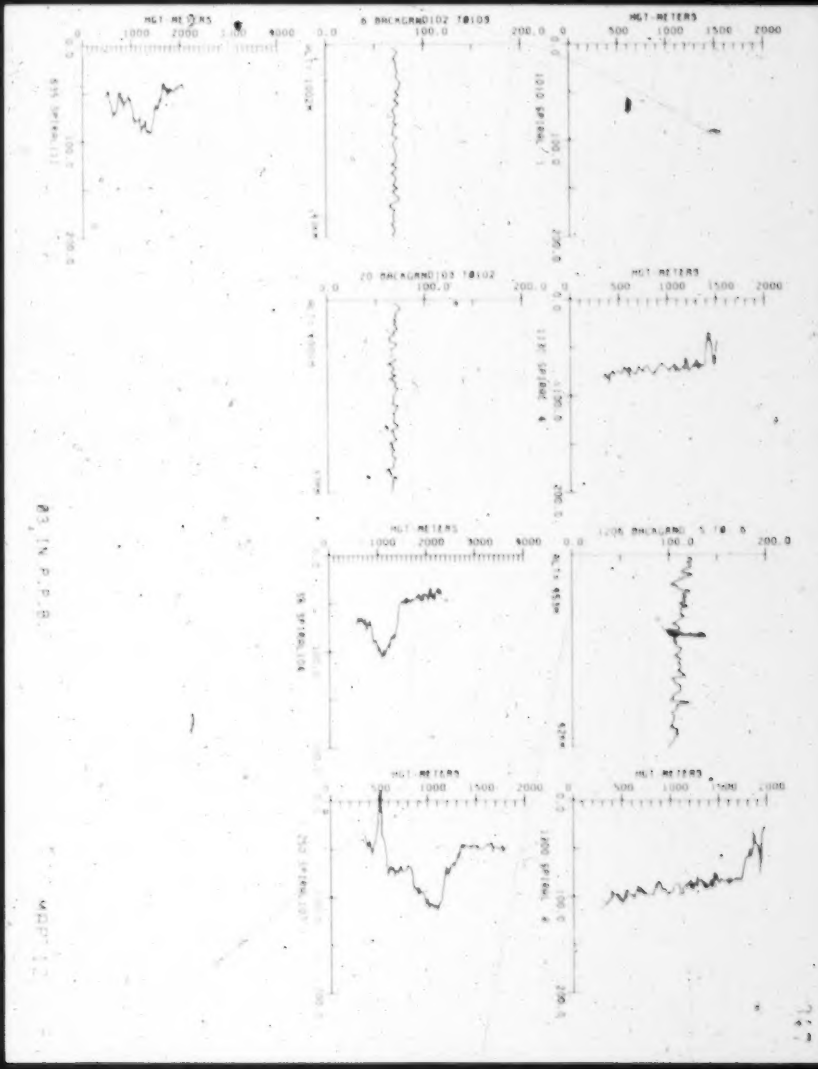
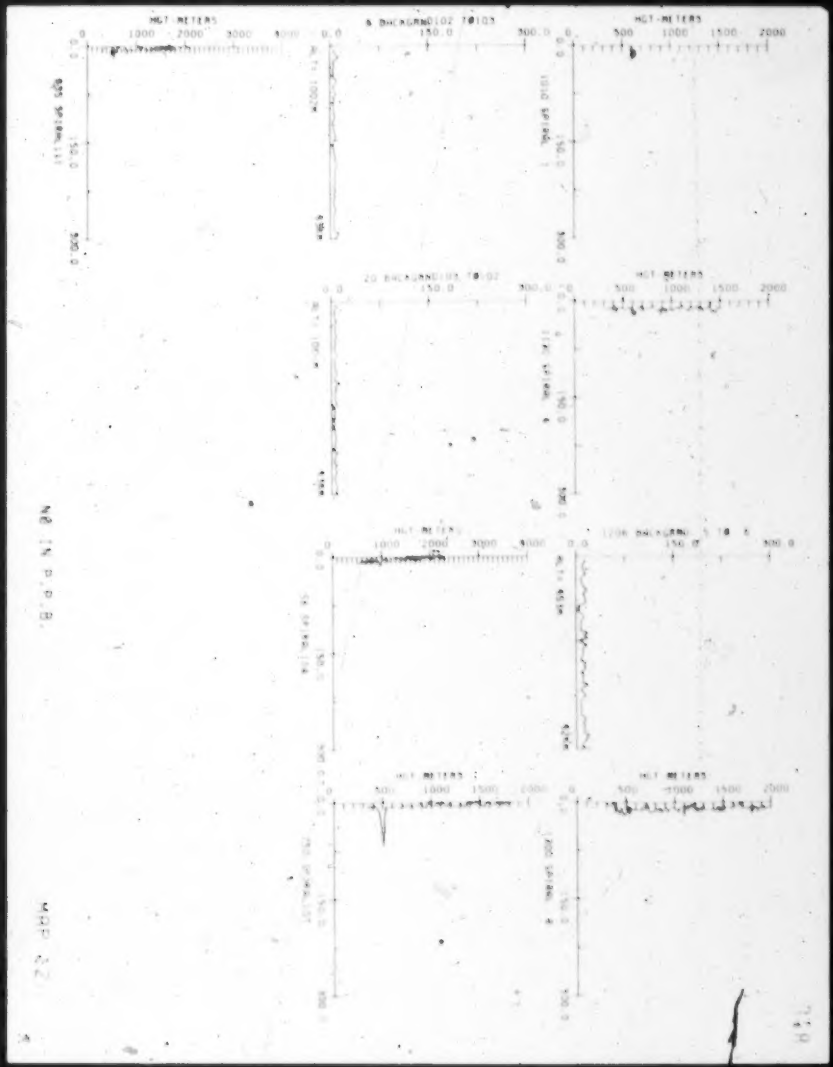
0
500
1000
1500
2000
HGT METERS
0
500
1000
1500
2000

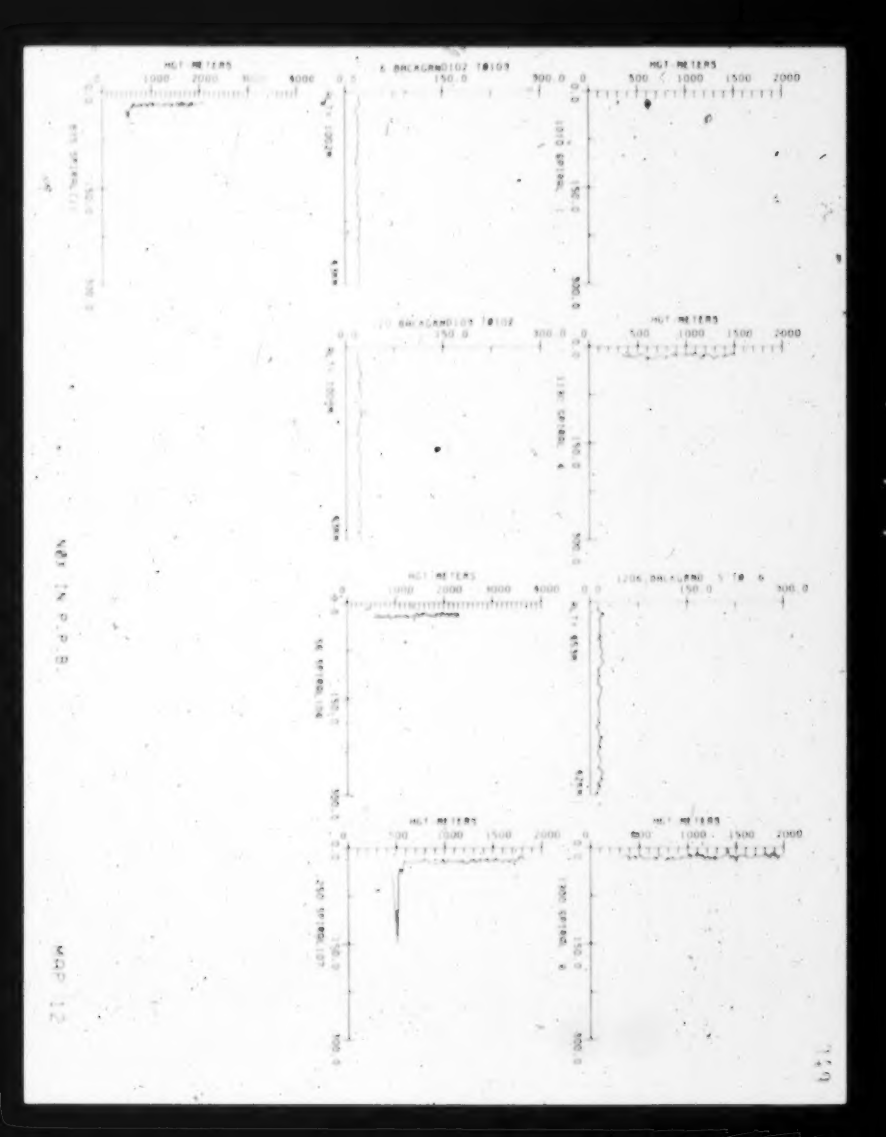


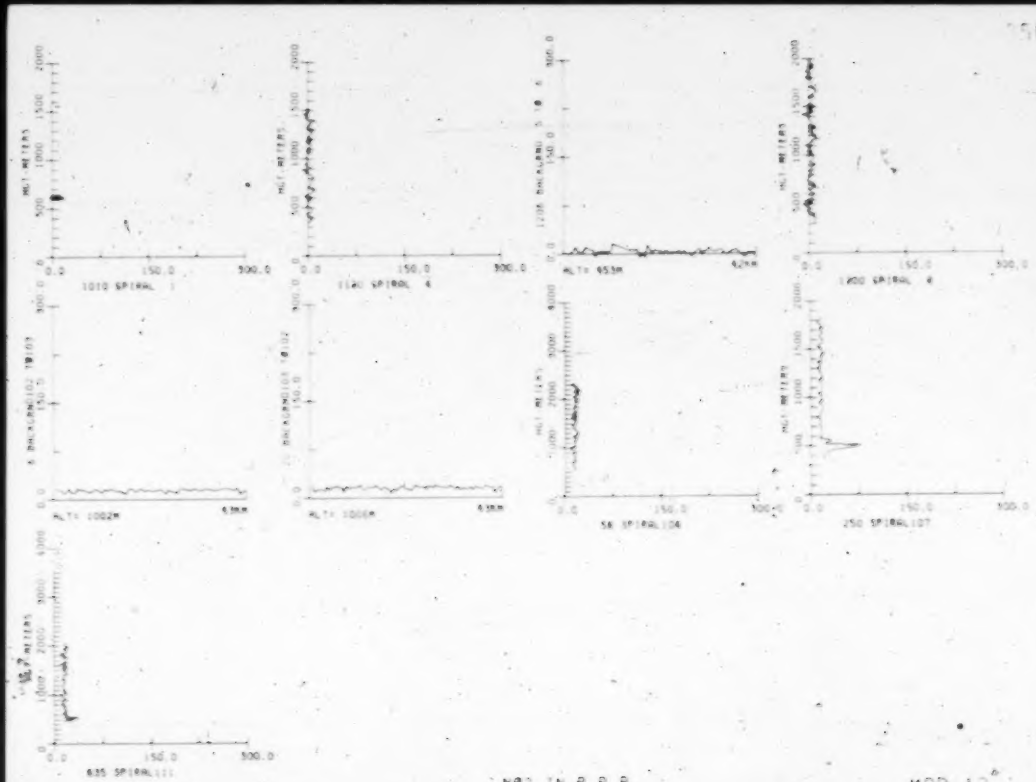
BSCAT IN $10^{-5}M^{-1}$

MAP 12


HGT-METERS
HGT-METERS
HGT-METERS
HGT-METERS
HGT-METERS
HGT-METERS

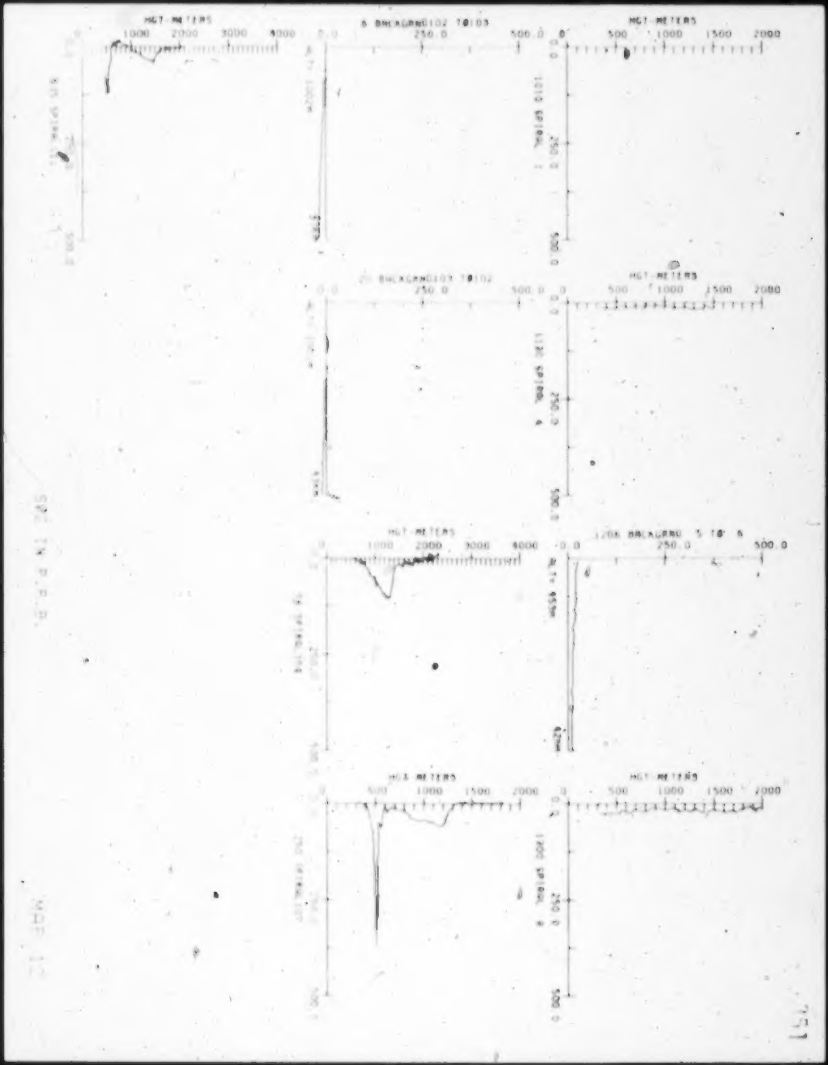






NØ2 IN P.P.B.

MAP 12



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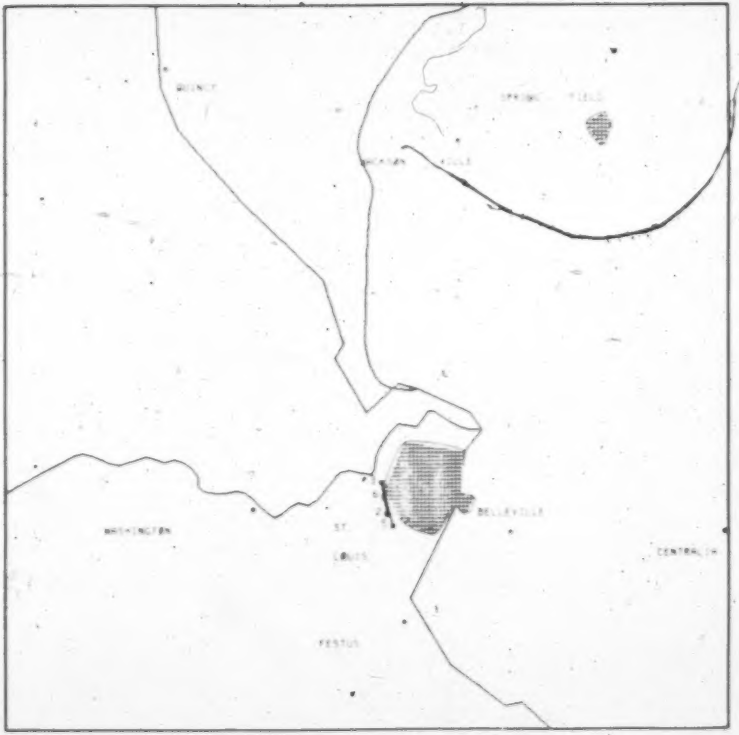
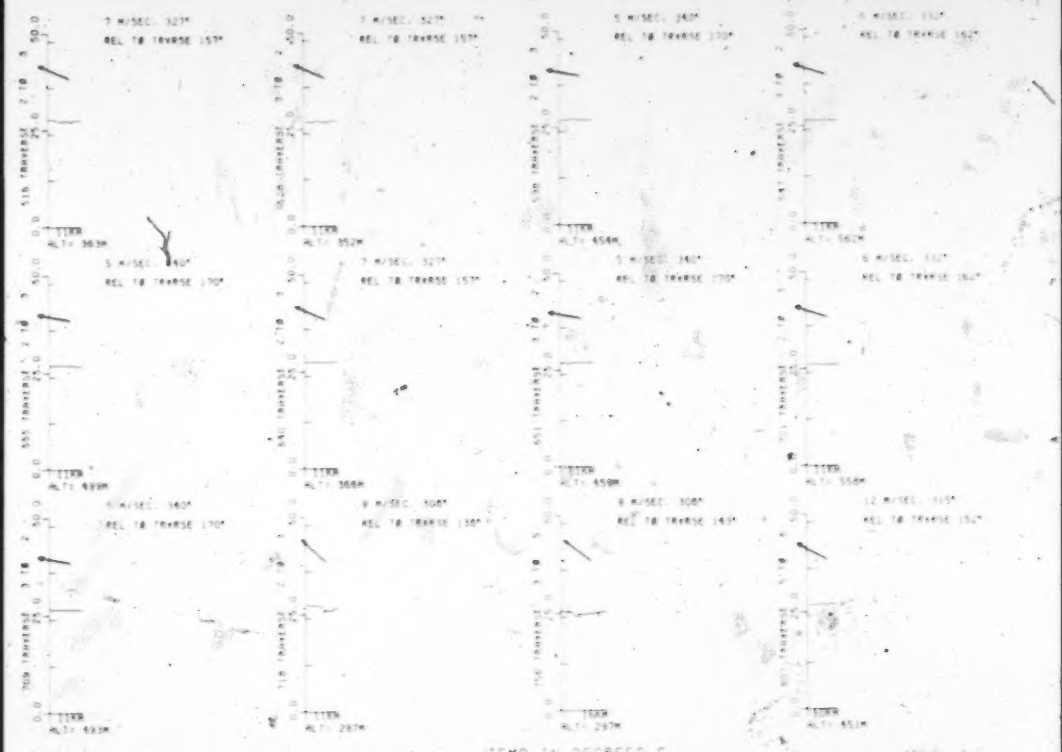
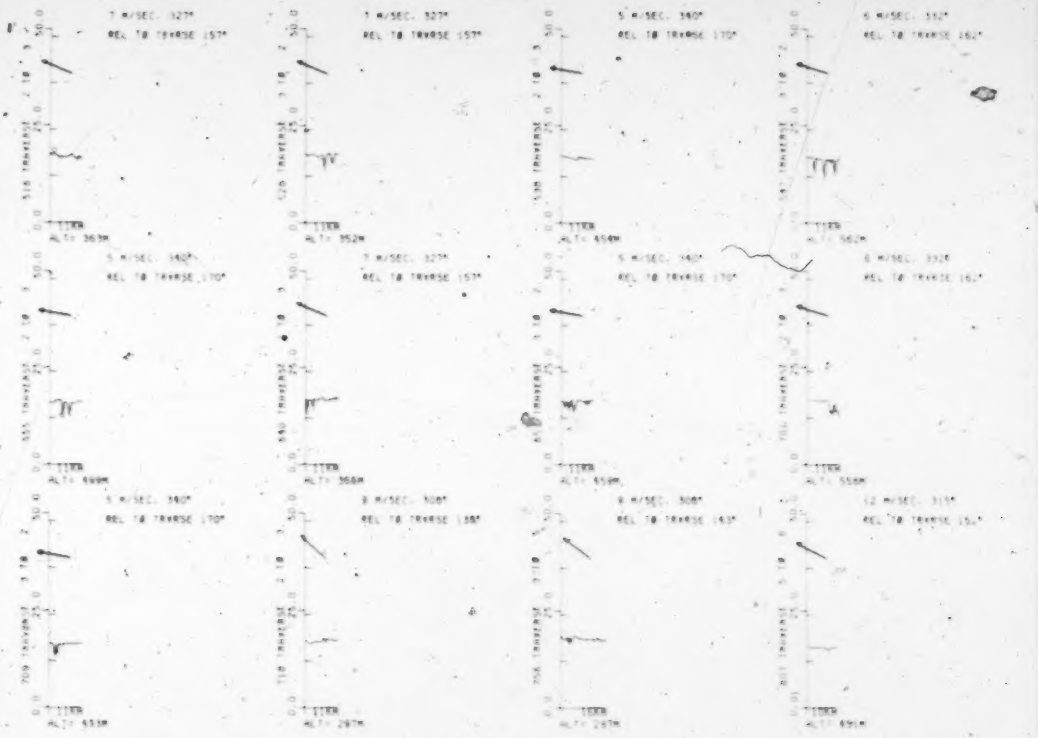
MAP 14



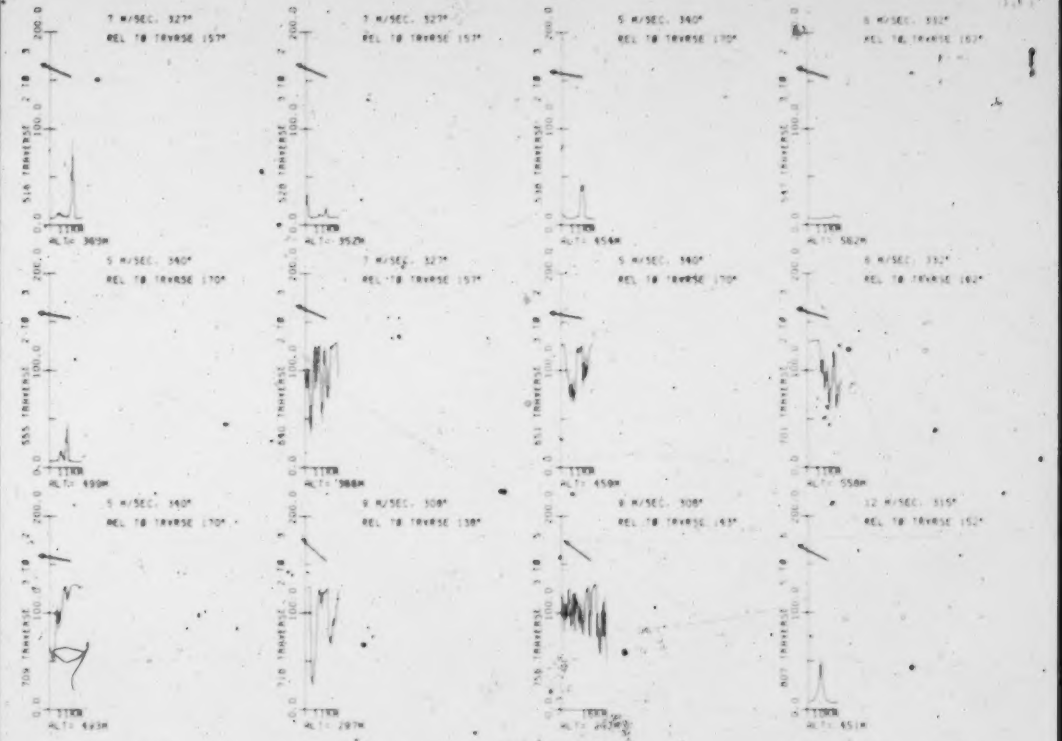

7 M/SEC. 327°
REL TO TRANSE 157°
ALT: 303M
7 M/SEC. 327°
REL TO TRANSE 157°
ALT: 352M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT: 454M
6 M/SEC. 332°
REL TO TRANSE 162°
ALT: 562M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT: 499M
7 M/SEC. 327°
REL TO TRANSE 157°
ALT: 368M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT: 459M
6 M/SEC. 332°
REL TO TRANSE 162°
ALT: 556M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT: 493M
9 M/SEC. 306°
REL TO TRANSE 136°
ALT: 287M
8 M/SEC. 308°
REL TO TRANSE 141°
ALT: 287M
12 M/SEC. 315°
REL TO TRANSE 152°
ALT: 451M
TEMP IN DEGREES C

TEMP IN DEGREES C

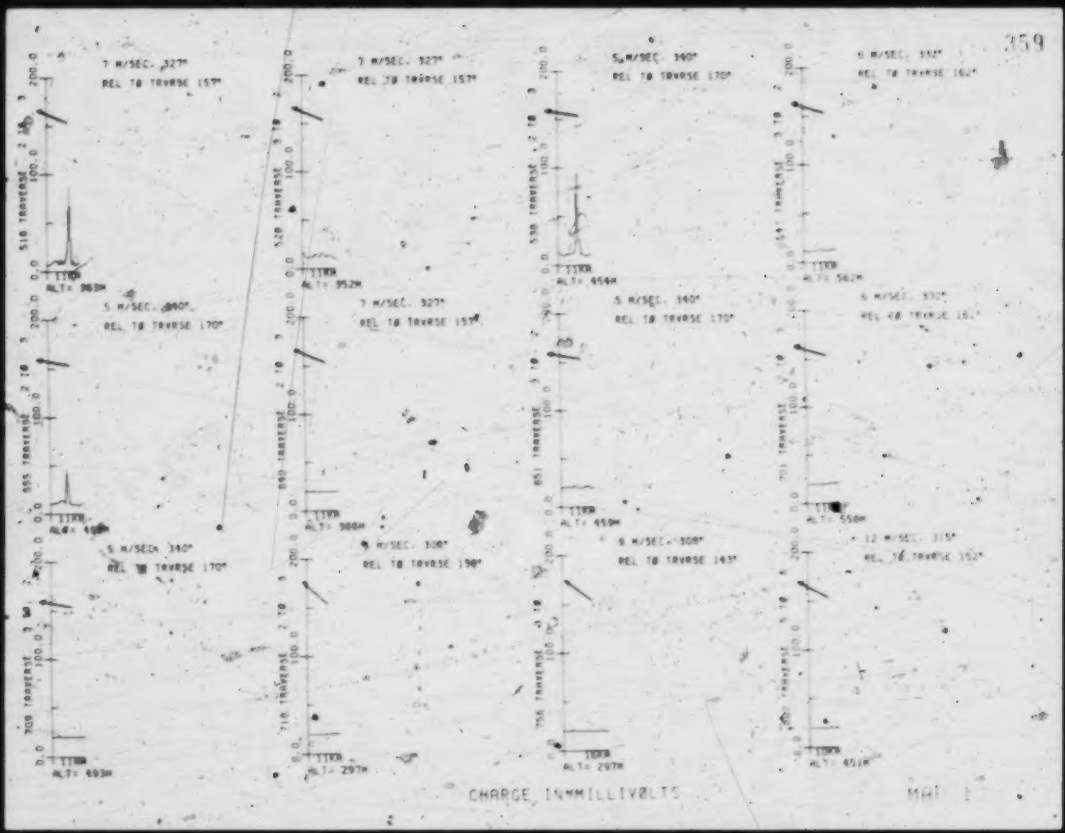
MAP 13


7 M/SEC. 327°
REL TO TRANSE 157°
ALT= 363M
7 M/SEC. 327°
REL TO TRANSE 157°
ALT= 352M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT= 454M
5 M/SEC. 332°
REL TO TRANSE 162°
ALT= 562M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT= 499M
7 M/SEC. 327°
REL TO TRANSE 157°
ALT= 368M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT= 459M
6 M/SEC. 332°
REL TO TRANSE 162°
ALT= 556M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT= 453M
8 M/SEC. 308°
REL TO TRANSE 138°
ALT= 287M
8 M/SEC. 308°
REL TO TRANSE 143°
ALT= 287M
12 M/SEC. 315°
REL TO TRANSE 152°
ALT= 491M
DEWPOINT IN DEGREES C

DEWPOINT IN DEGREES C


7 M/SEC. 327°
REL TO TRVRSE 157°
ALT= 305M
7 M/SEC. 327°
REL TO TRVRSE 157°
ALT= 352M
5 M/SEC. 340°
REL TO TRVRSE 170°
ALT= 454M
5 M/SEC. 332°
REL TO TRVRSE 162°
ALT= 582M
5 M/SEC. 340°
REL TO TRVRSE 170°
ALT= 499M
7 M/SEC. 327°
REL TO TRVRSE 157°
ALT= 586M
5 M/SEC. 340°
REL TO TRVRSE 170°
ALT= 459M
6 M/SEC. 332°
REL TO TRVRSE 162°
ALT= 550M
5 M/SEC. 340°
REL TO TRVRSE 170°
ALT= 643M
9 M/SEC. 308°
REL TO TRVRSE 138°
ALT= 287M
9 M/SEC. 308°
REL TO TRVRSE 143°
12 M/SEC. 315°
REL TO TRVRSE 152°
ALT= 451M

CNC IN $10^{3}CM^{-3}$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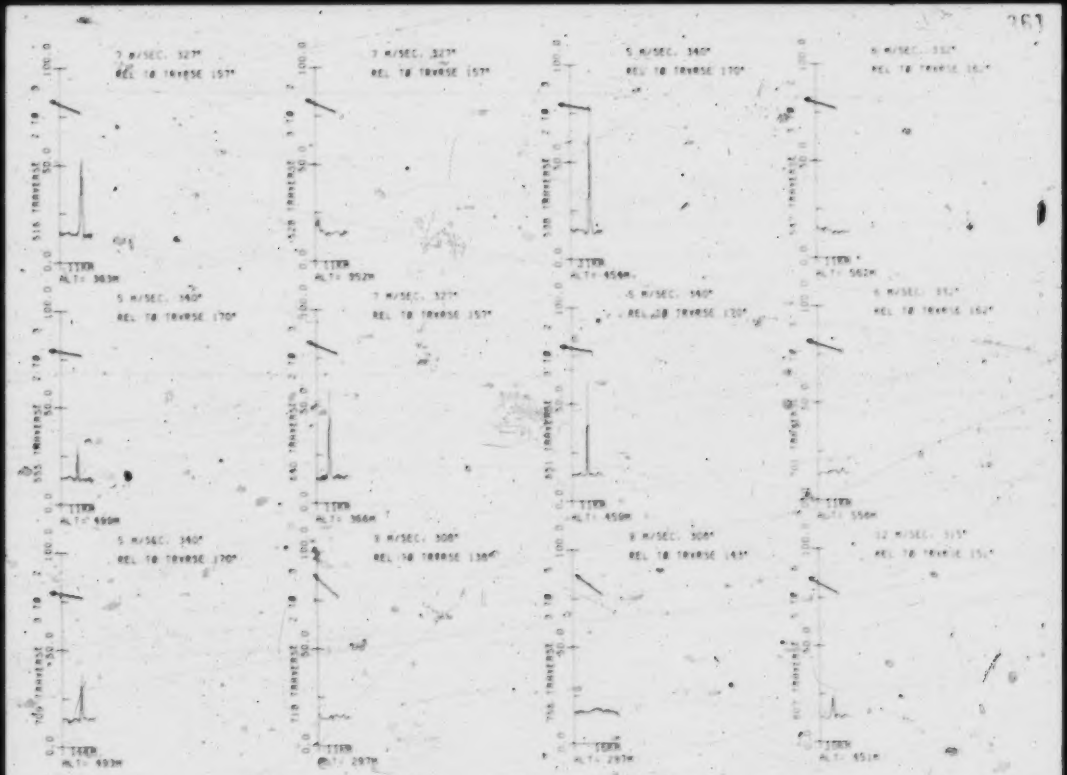
REL TO TRVRSE 157°
510 TRAVERSE
ALT= 963M
7 M/SEC. 327°
REL TO TRVRSE 157°
520 TRAVERSE
ALT= 952M
5 M/SEC. 340°
REL TO TRVRSE 170°
530 TRAVERSE
ALT= 954M
5 M/SEC. 332°
REL TO TRVRSE 162°
540 TRAVERSE
ALT= 562M
5 M/SEC. 340°
REL TO TRVRSE 170°
555 TRAVERSE
7 M/SEC. 327°
REL TO TRVRSE 157°
640 TRAVERSE
ALT= 900M
5 M/SEC. 340°
REL TO TRVRSE 170°
651 TRAVERSE
ALT= 459M
5 M/SEC. 332°
REL TO TRVRSE 162°
701 TRAVERSE
ALT= 550M
5 M/SEC. 340°
REL TO TRVRSE 170°
710 TRAVERSE
ALT= 493M
9 M/SEC. 300°
REL TO TRVRSE 190°
715 TRAVERSE
ALT= 297M
9 M/SEC. 300°
REL TO TRVRSE 143°
755 TRAVERSE
ALT= 297M
12 M/SEC. 315°
REL TO TRVRSE 152°
ALT= 451M
CHARGE IN MILLIVOLTS
MAR

CHARGE IN MILLIVOLTS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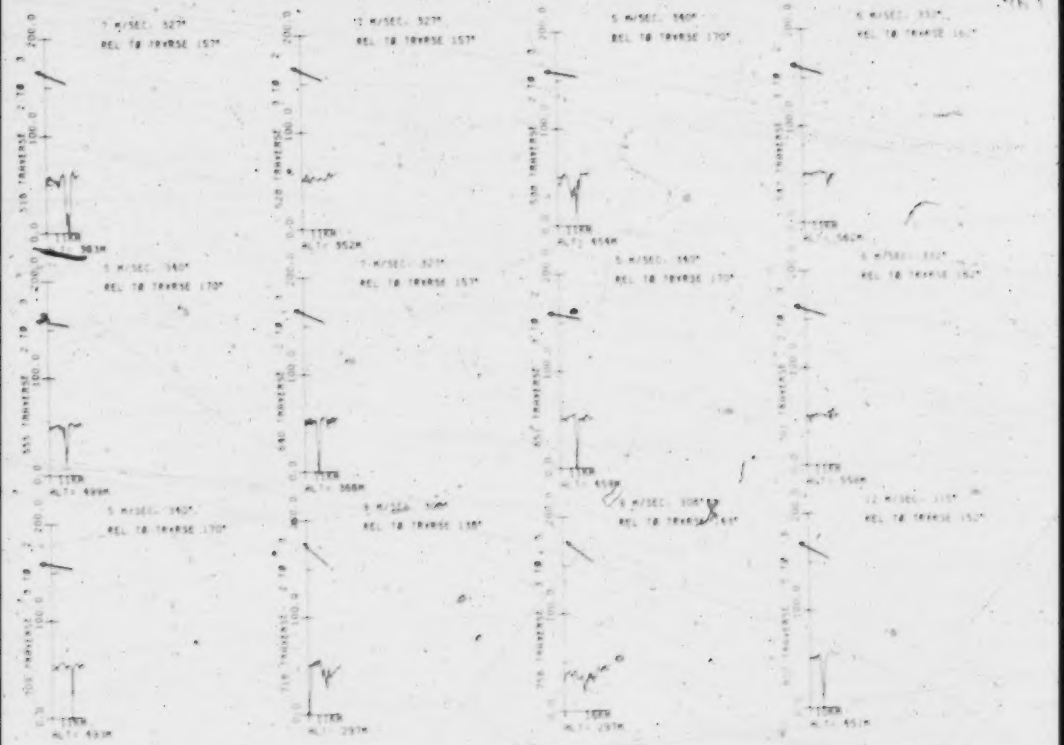
REL TO TRVRSE 157°
ALT= 383M
7 M/SEC. 327°
REL TO TRVRSE 157°
ALT= 952M
5 M/SEC. 340°
REL TO TRVRSE 170°
ALT= 454M
ALT= 562M
5 M/SEC. 340°
REL TO TRVRSE 170°
ALT= 499M
7 M/SEC. 327°
REL TO TRVRSE 157°
ALT= 366M
5 M/SEC. 340°
REL TO TRVRSE 170°
ALT= 459M
ALT= 556M
5 M/SEC. 340°
REL TO TRVRSE 170°
ALT= 493M
9 M/SEC. 308°
REL TO TRVRSE 138°
ALT= 297M
9 M/SEC. 308°
REL TO TRVRSE 143°
ALT= 297M
12 M/SEC. 315°
ALT= 451M
BSCAT IN 10 M

BSCAT IN 10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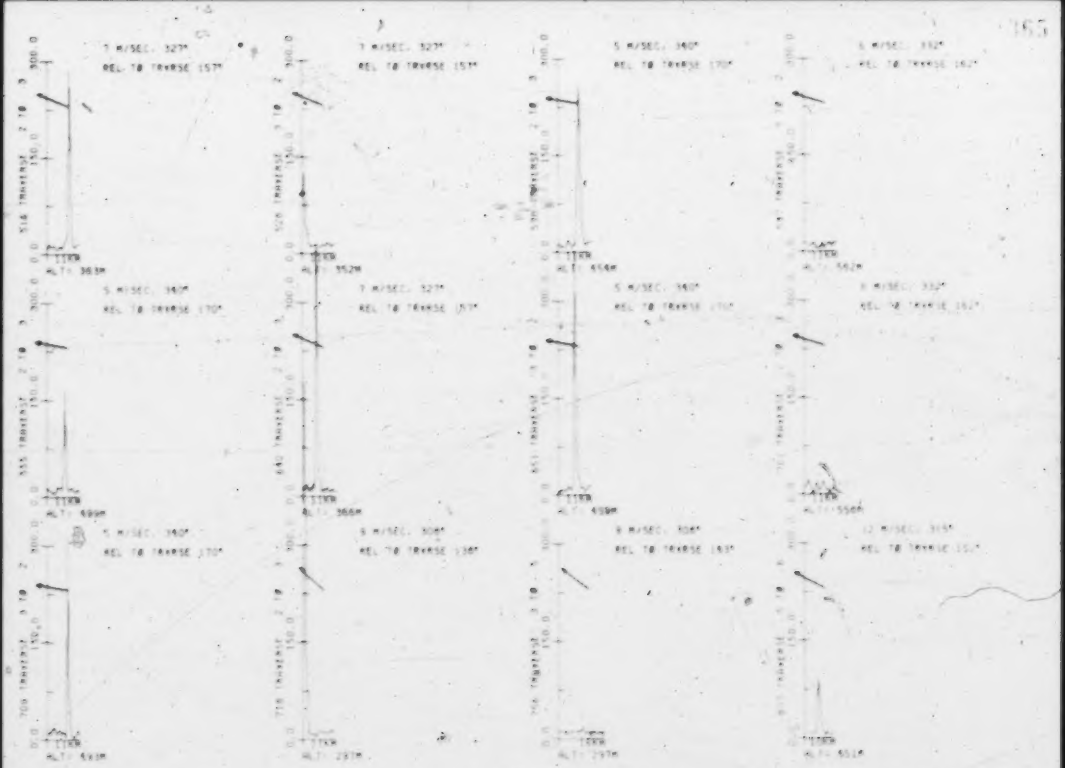
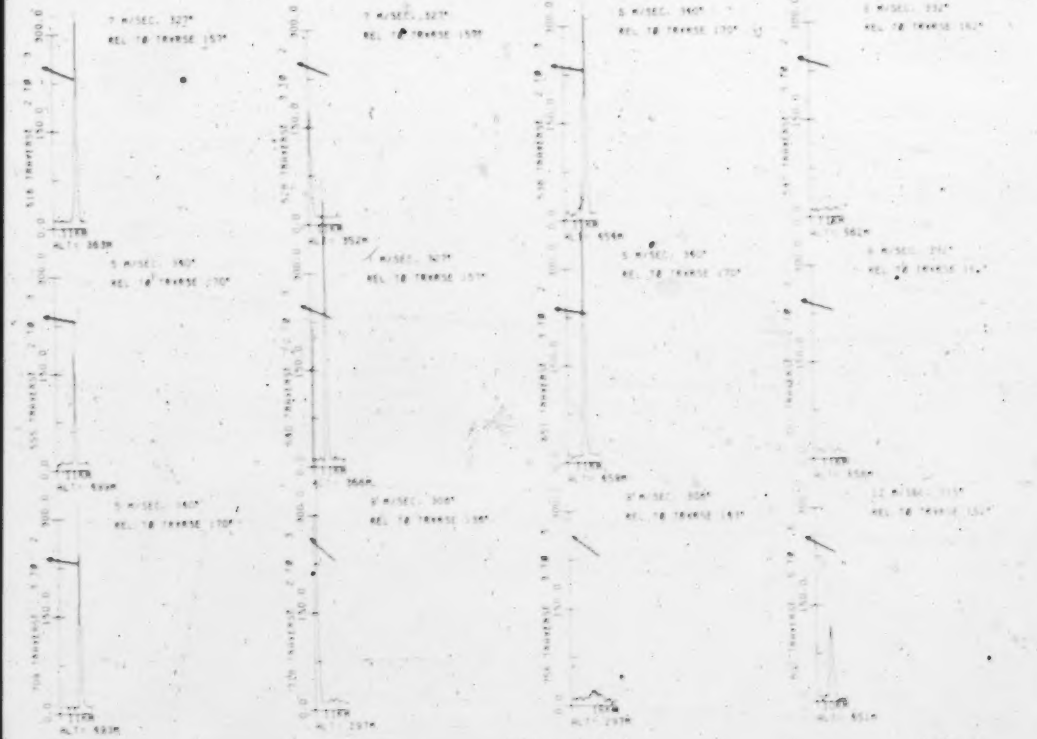
REL TO TRVRSE 157°
5 M/SEC. 340°
REL TO TRVRSE 170°
5 M/SEC. 340°
REL TO TRVRSE 170°
5 M/SEC. 340°
REL TO TRVRSE 170°
5 M/SEC. 340°
REL TO TRVRSE 170°
5 M/SEC. 340°
REL TO TRVRSE 170°
ALT= 352M
ALT= 454M
ALT= 562M
ALT= 366M
ALT= 459M
ALT= 558M
ALT= 297M
ALT= 451M
11KM
0.0
100.0
200.0

83 IN P.P.B.

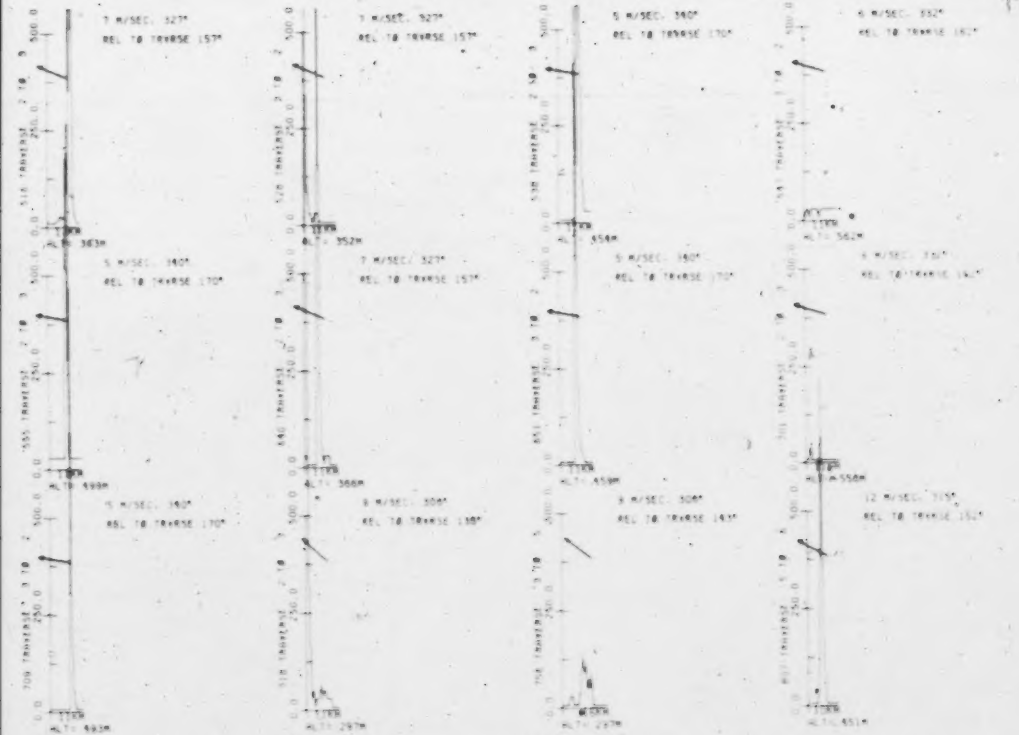

7 M/SEC. 327°
REL TO TRANSEC 157°
ALT: 363M
7 M/SEC. 327°
REL TO TRANSEC 157°
ALT: 352M
5 M/SEC. 340°
REL TO TRANSEC 170°
ALT: 414M
5 M/SEC. 332°
REL TO TRANSEC 162°
ALT: 562M
5 M/SEC. 340°
REL TO TRANSEC 170°
ALT: 499M
7 M/SEC. 327°
REL TO TRANSEC 157°
ALT: 366M
5 M/SEC. 340°
REL TO TRANSEC 170°
ALT: 459M
5 M/SEC. 332°
REL TO TRANSEC 162°
ALT: 556M
5 M/SEC. 340°
REL TO TRANSEC 170°
ALT: 543M
5 M/SEC. 304°
REL TO TRANSEC 134°
ALT: 297M
5 M/SEC. 304°
REL TO TRANSEC 134°
ALT: 297M
12 M/SEC. 315°
REL TO TRANSEC 145°
ALT: 551M


7 M/SEC. 327°
REL TO TRAVERSE 157°
ALT: 363M
7 M/SEC. 327°
REL TO TRAVERSE 157°
ALT: 352M
5 M/SEC. 340°
REL TO TRAVERSE 170°
ALT: 454M
5 M/SEC. 340°
REL TO TRAVERSE 170°
ALT: 459M
5 M/SEC. 340°
REL TO TRAVERSE 170°
ALT: 493M
9 M/SEC. 306°
REL TO TRAVERSE 136°
ALT: 297M
9 M/SEC. 306°
REL TO TRAVERSE 141°
ALT: 297M
12 M/SEC. 315°
REL TO TRAVERSE 152°
ALT: 451M

NOX IN P.P.B.

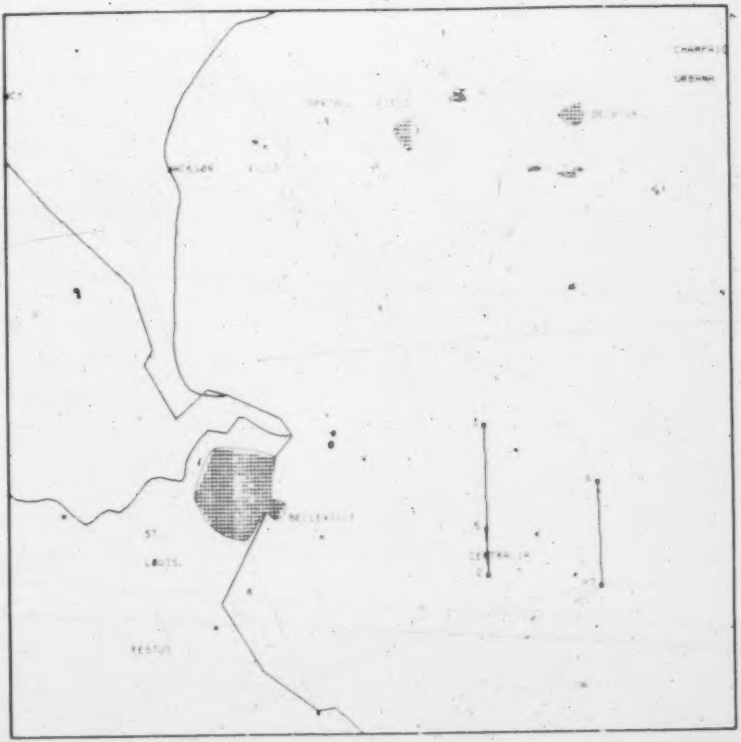
NOX IN P.P.B.

MAR 13

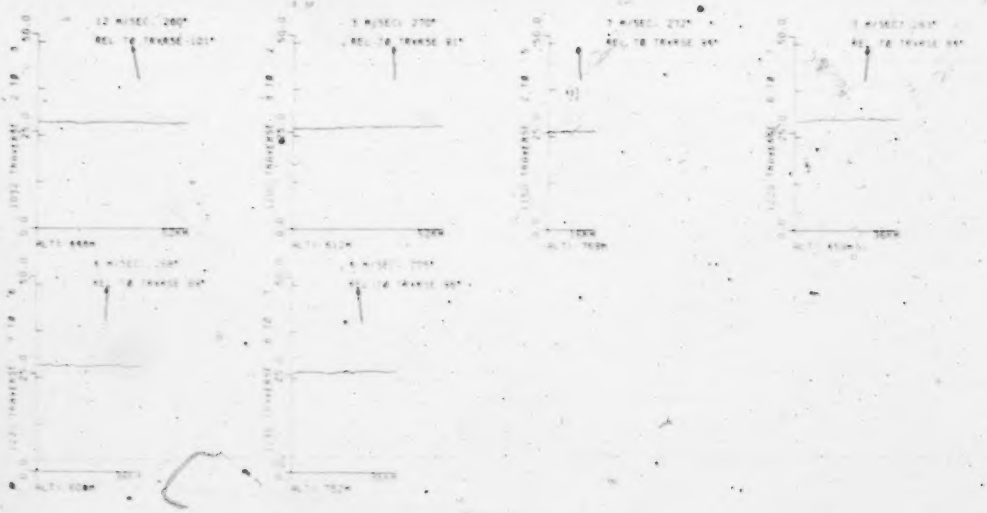

7 M/SEC. 327°
REL TO TRANSE 157°
ALT: 383M
7 M/SEC. 327°
REL TO TRANSE 157°
ALT: 352M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT: 659M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT: 562M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT: 599M
7 M/SEC. 327°
REL TO TRANSE 157°
ALT: 566M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT: 459M
12 M/SEC. 315°
REL TO TRANSE 145°
ALT: 556M
5 M/SEC. 340°
REL TO TRANSE 170°
ALT: 493M
5 M/SEC. 304°
REL TO TRANSE 130°
ALT: 297M
5 M/SEC. 304°
REL TO TRANSE 141°
ALT: 297M
12 M/SEC. 315°
REL TO TRANSE 135°
ALT: 451M

B2872376

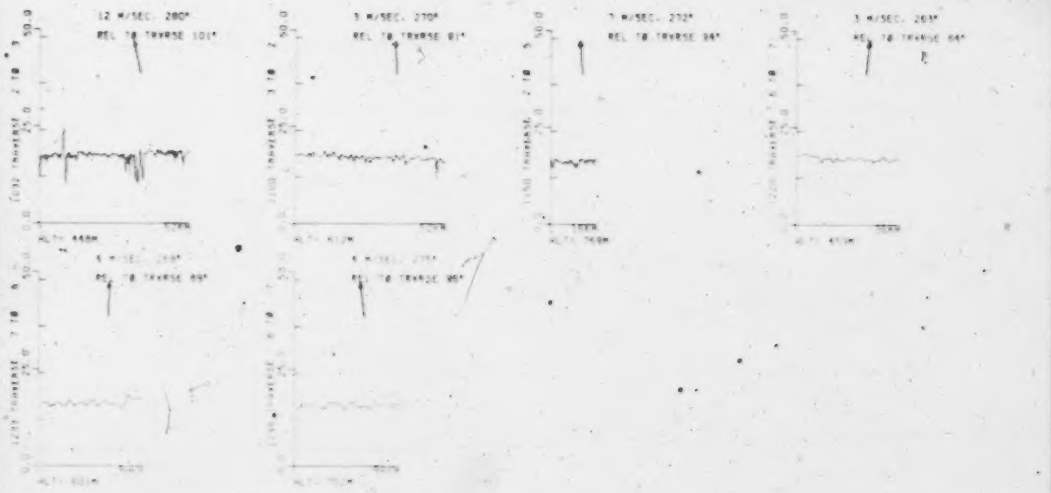
MAR 14



11-15

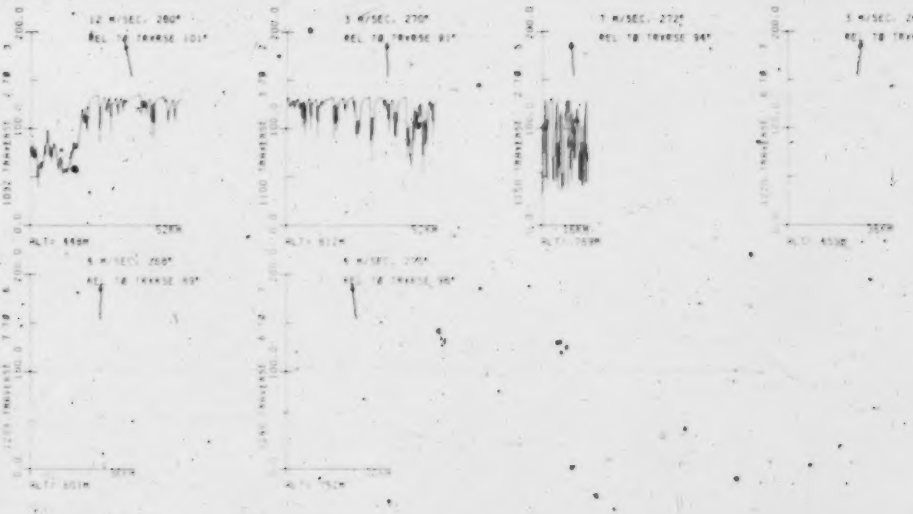


TEMP IN DEGREES C

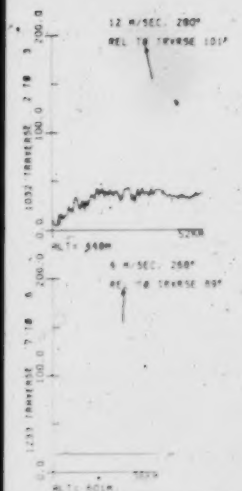


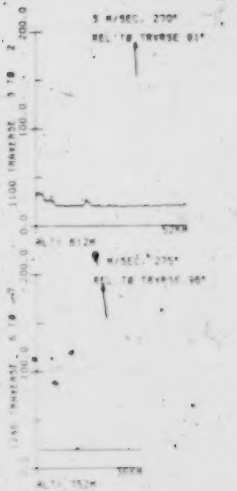
DEWPOINT IN DEGREES C

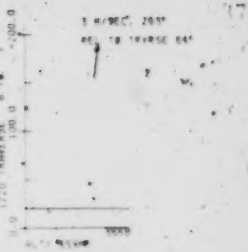
MAP



CNC IN $10^5 CM^{-3}$

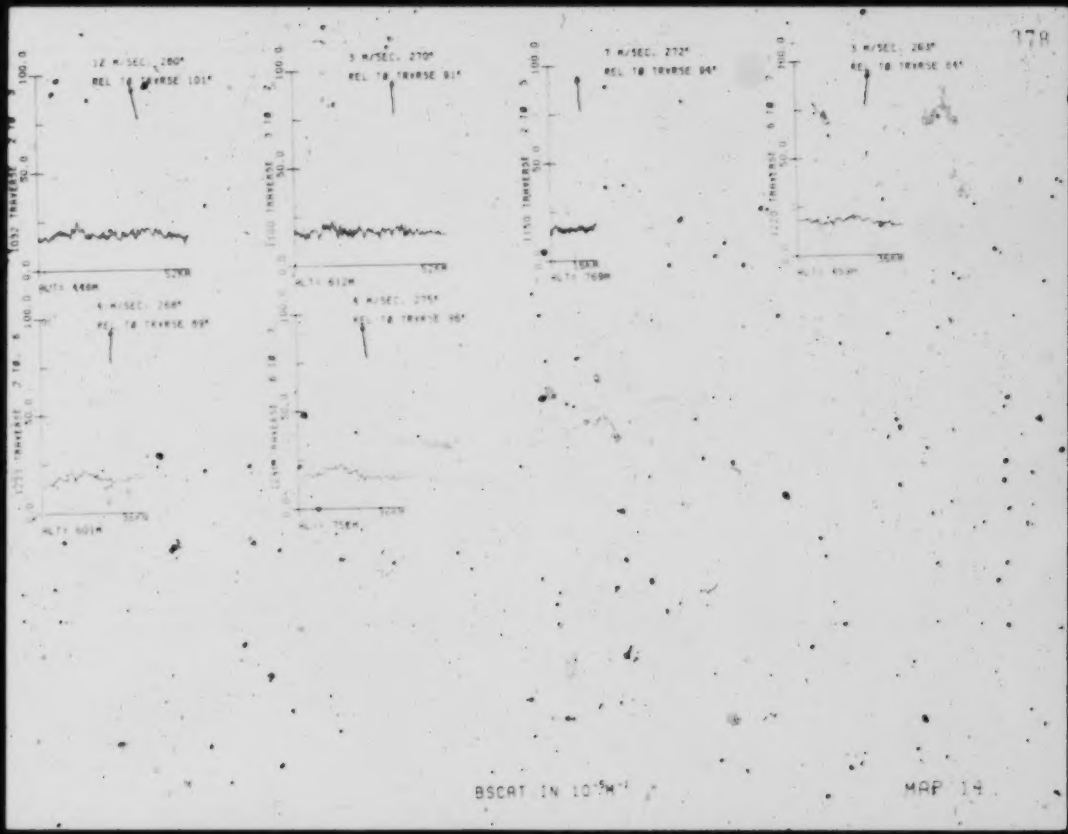


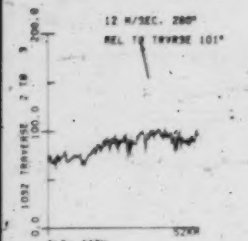


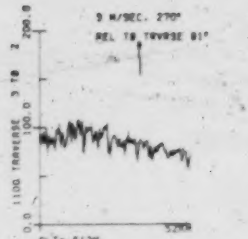


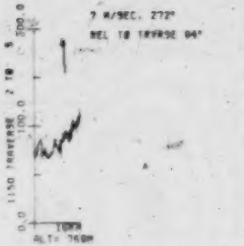
CHARGE IN MILLIVOLTS

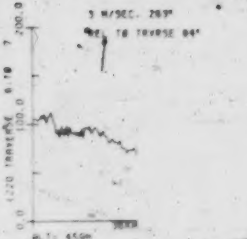
MAP 14

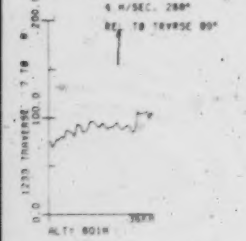

12 M/SEC. 280°
REL TO TRANSE 101°
5 M/SEC. 270°
REL TO TRANSE 81°
7 M/SEC. 272°
REL TO TRANSE 96°
3 M/SEC. 263°
REL TO TRANSE 84°
4 M/SEC. 268°
REL TO TRANSE 89°
4 M/SEC. 275°
REL TO TRANSE 98°
BSCAT IN 10⁻⁵M⁻¹
MAP 19

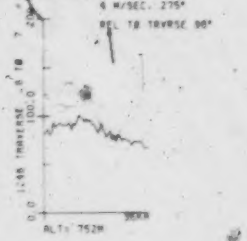






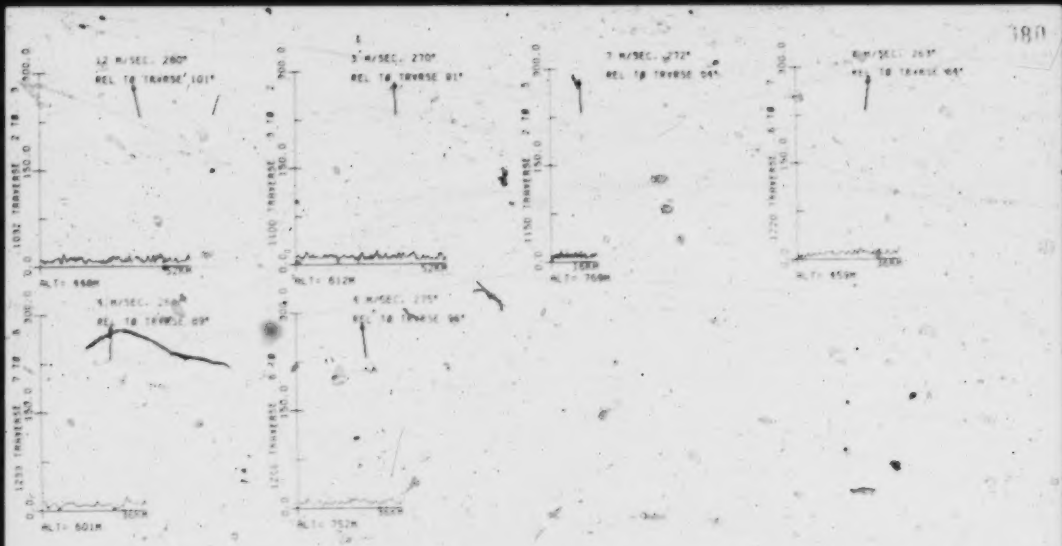






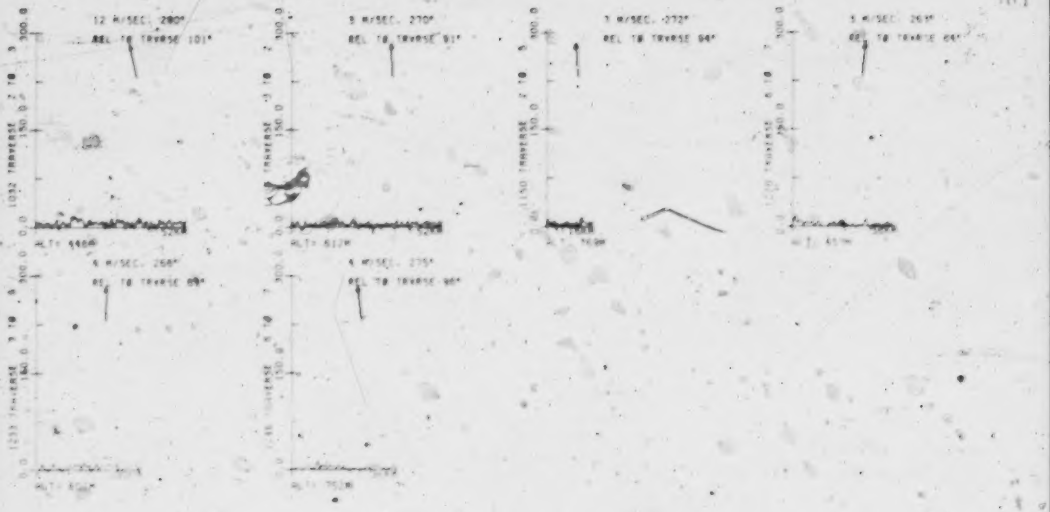
03 IN P.P.B.

MAP 14



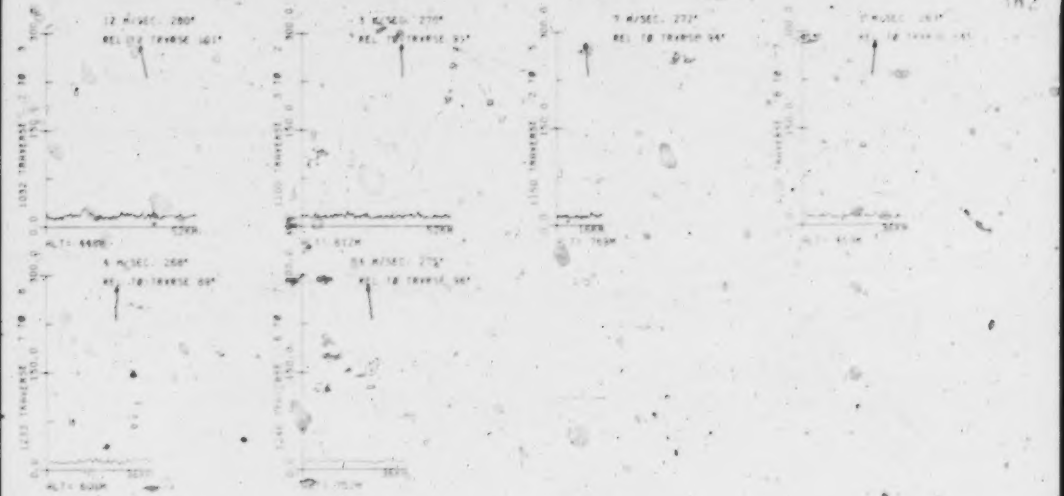
NØ IN P.P.B.

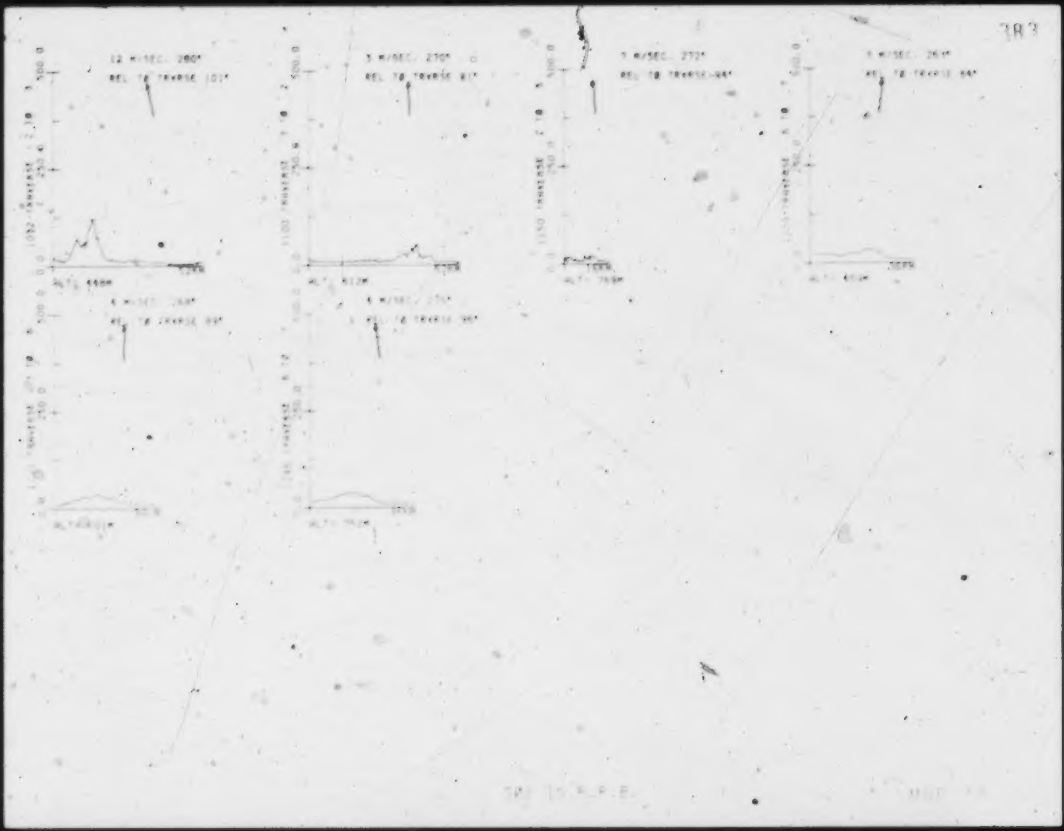
MAP 14

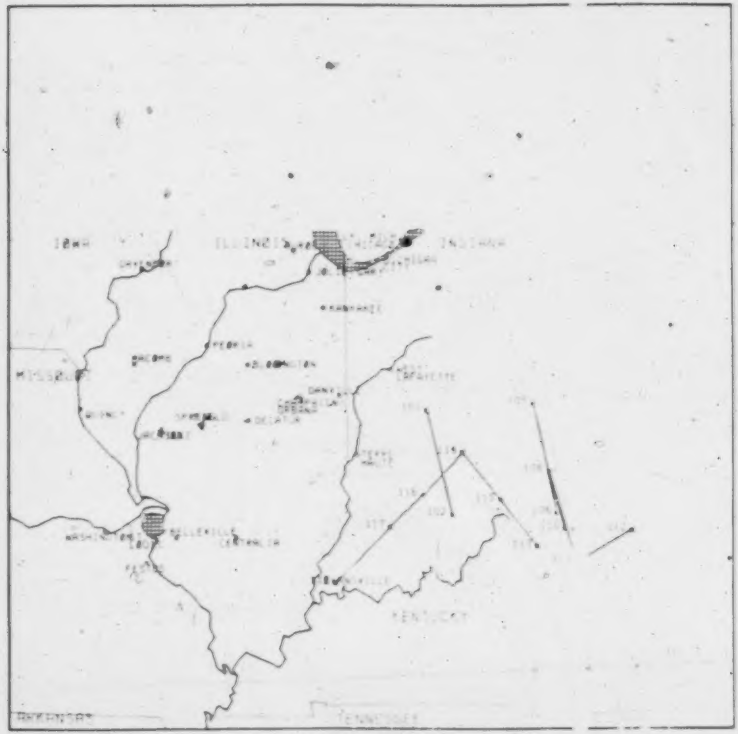


N02 IN P.P.B.

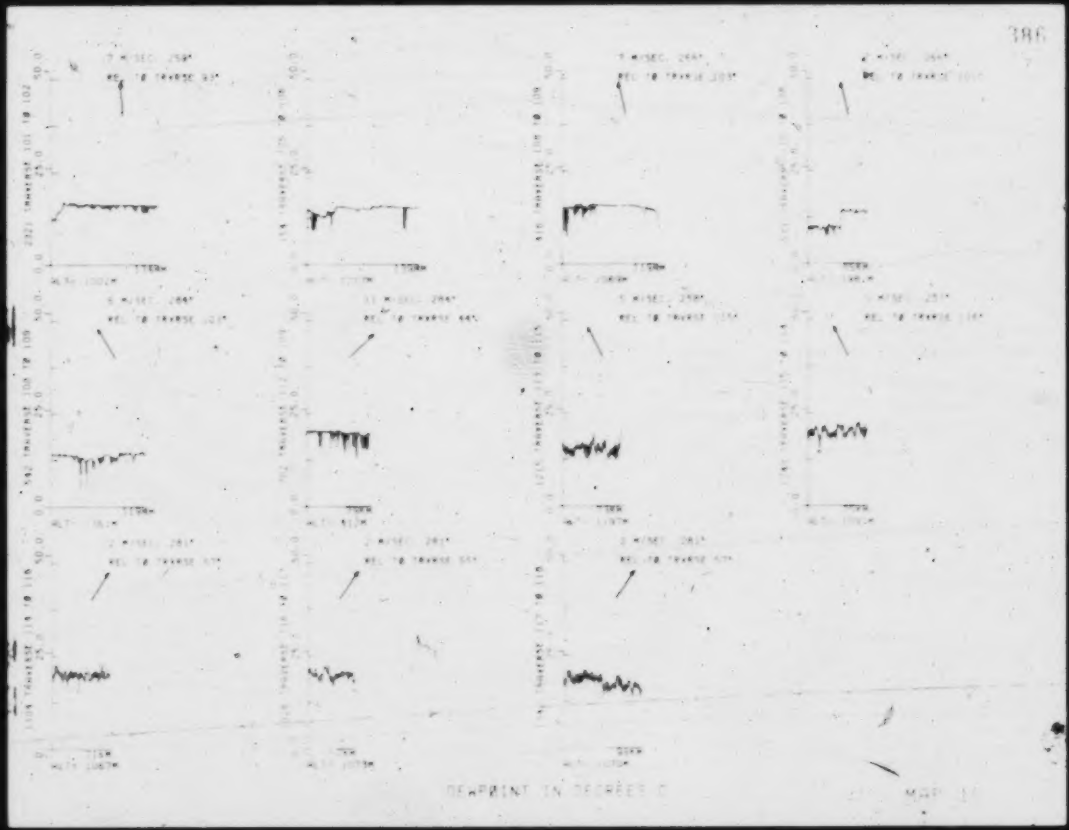
MAP 14

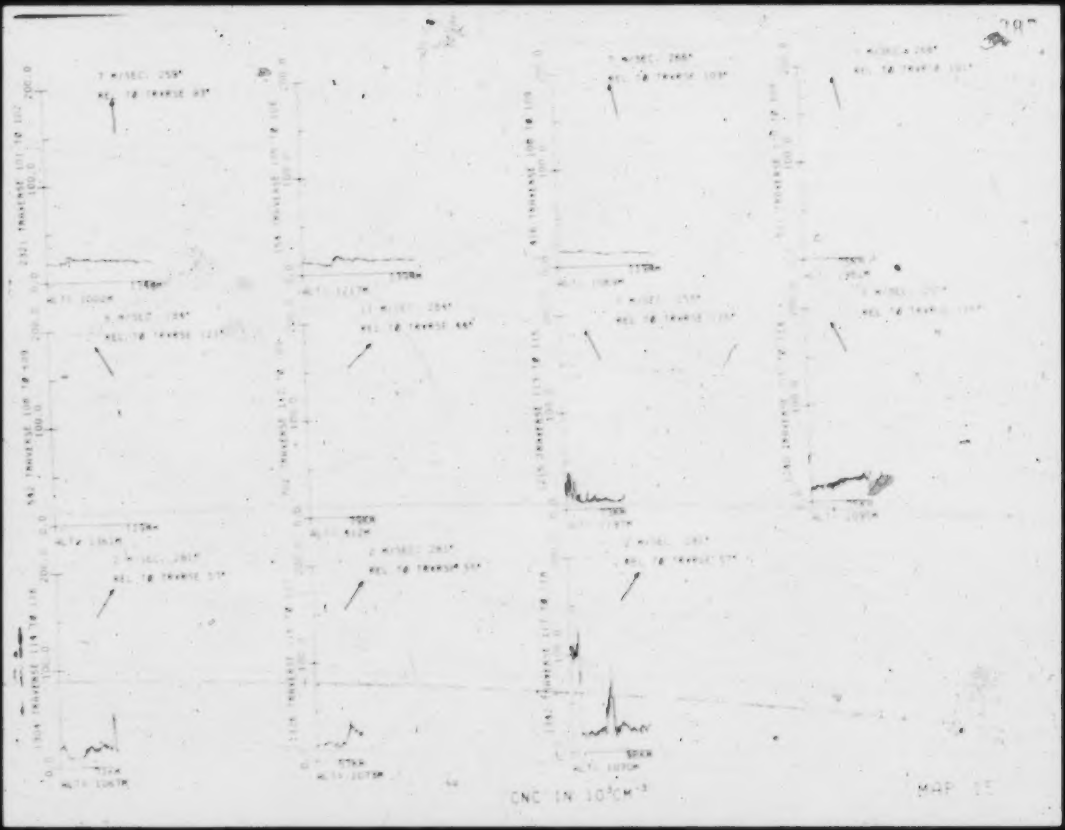


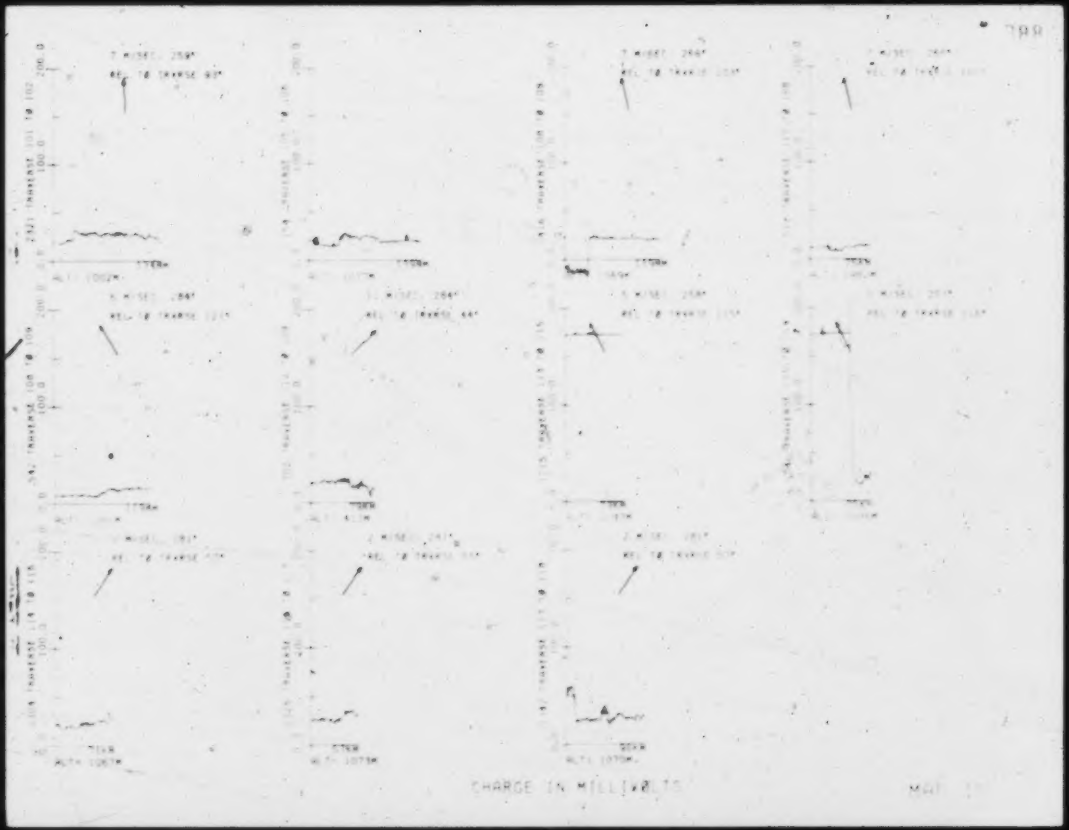



ILLINOIS
INDIANA
KENTUCKY

TEMP IN DEGREES C

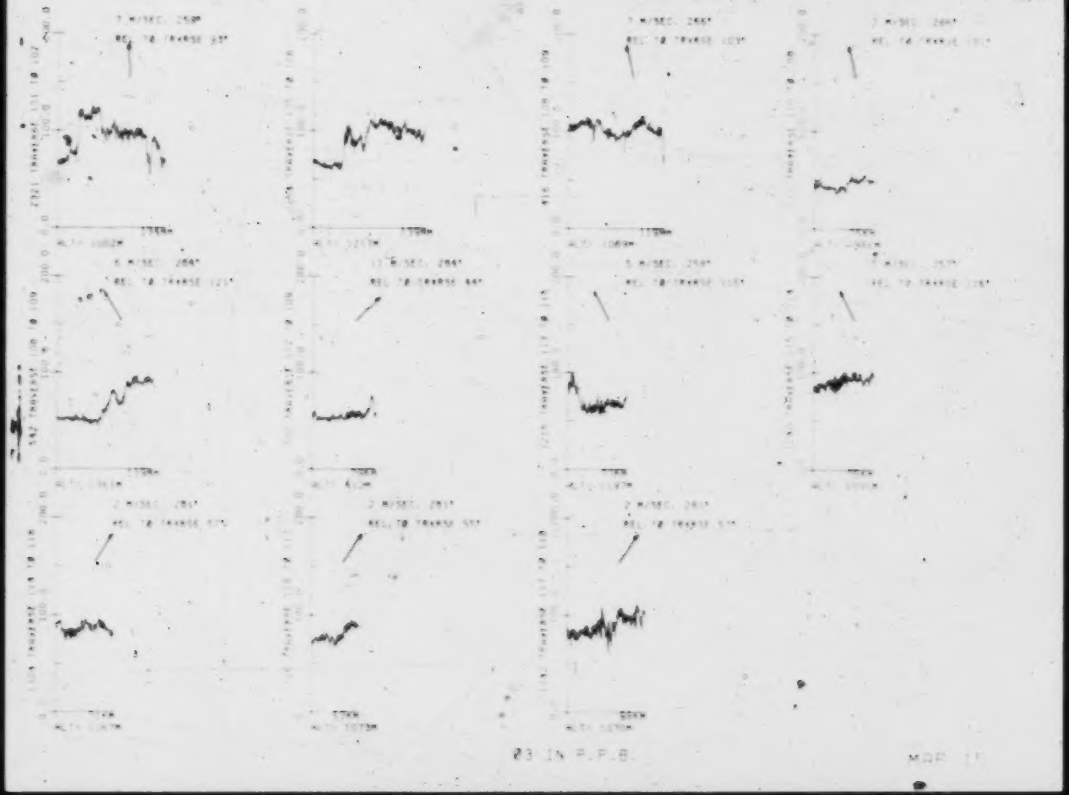

DEARPRINT IN DEGREES C

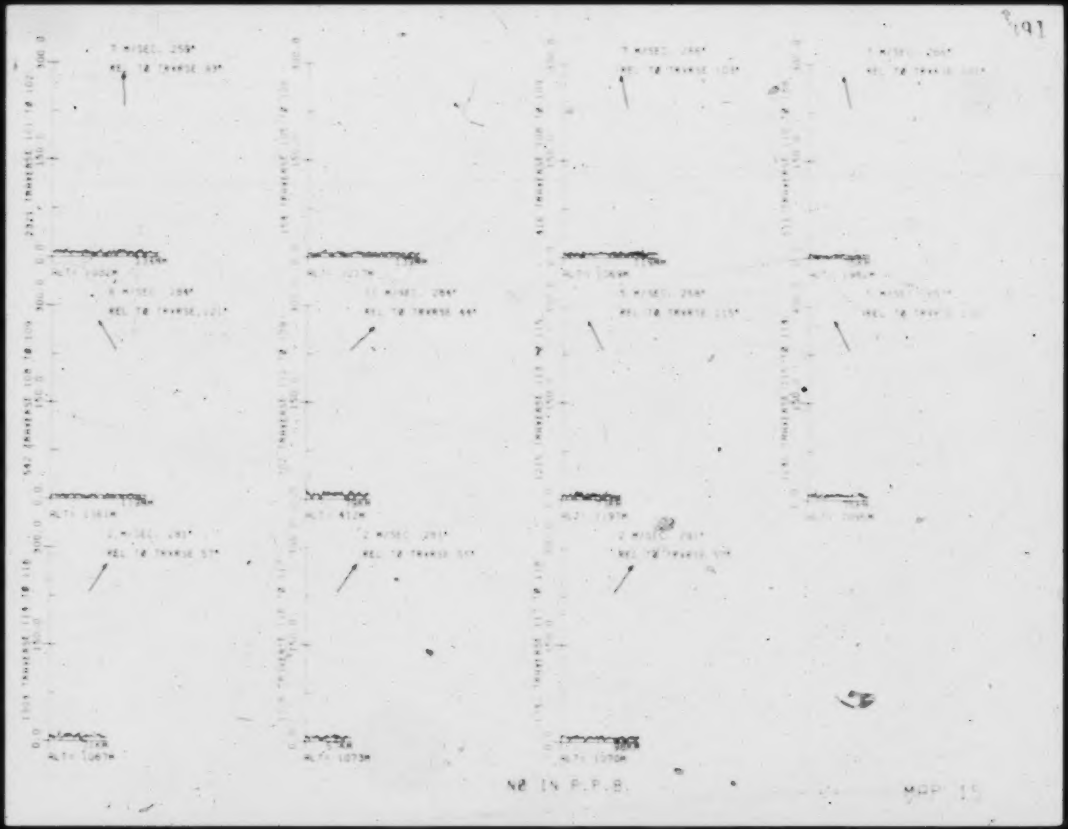

CNC IN $10^3 CM^{-3}$

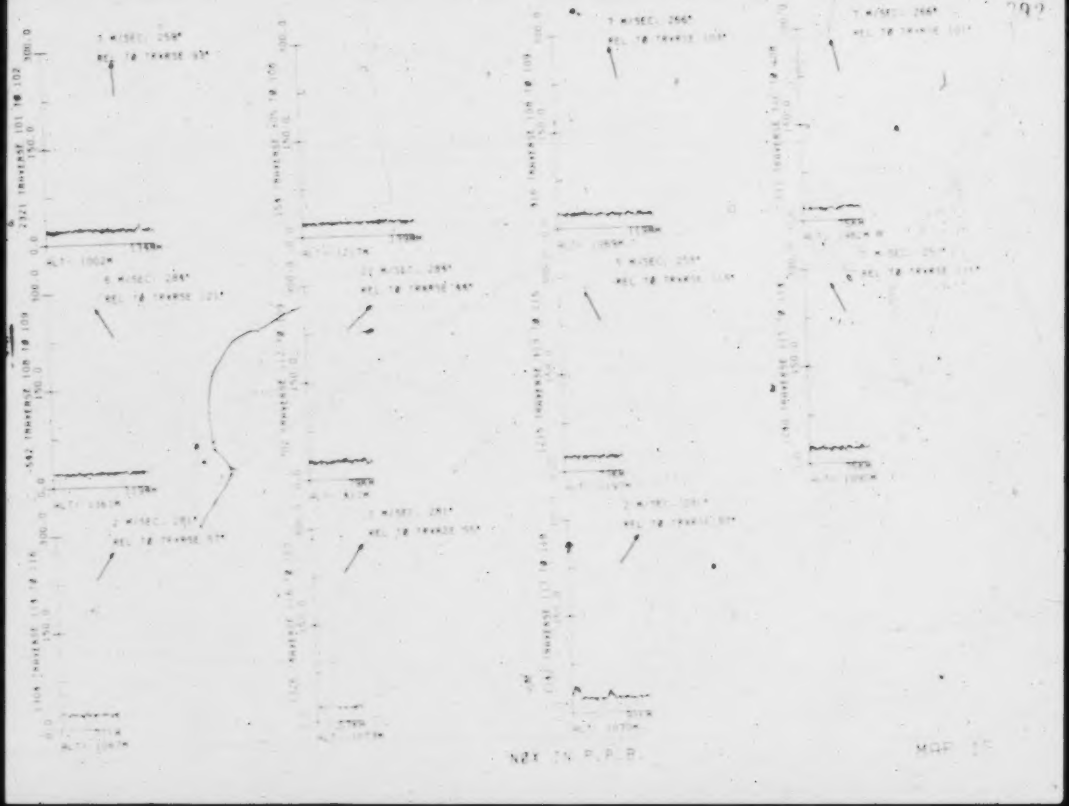

CHARGE IN MILLIVOLTS

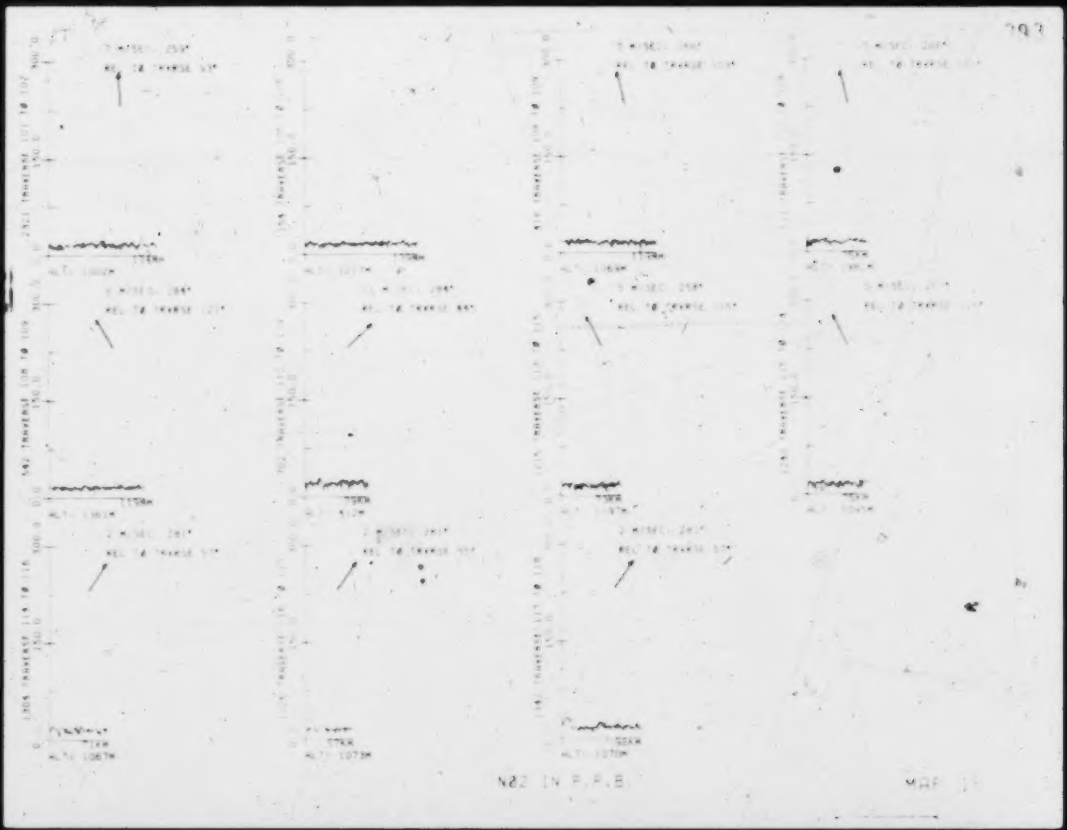
BSCAT IN $10^{-5}M^{-1}$

MAP 15

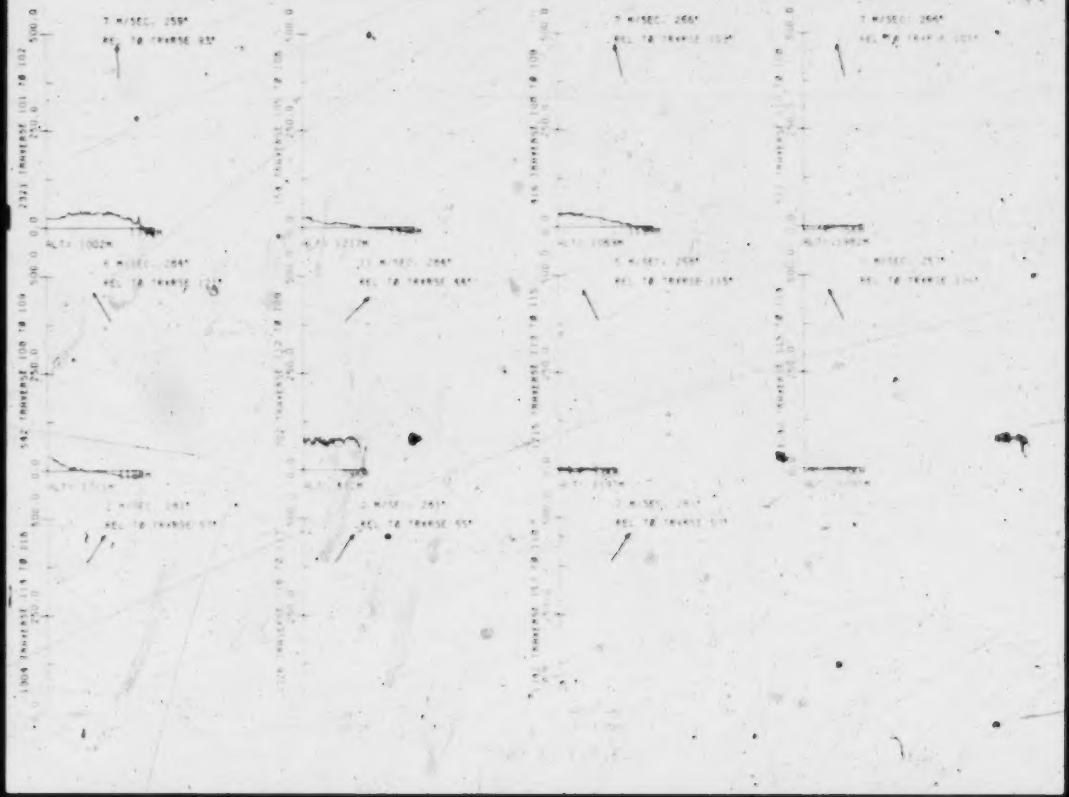


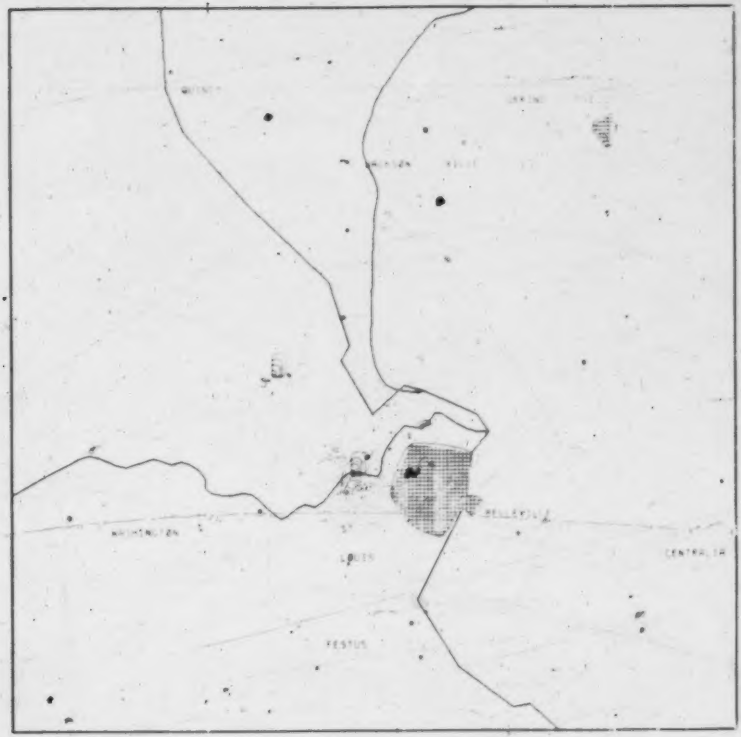

7 MISEC. 259°
REL TO TRAVRSE 83°
ALT: 1002M
8 MISEC. 284°
REL TO TRAVRSE 121°
ALT: 1361M
2 MISEC. 281°
REL TO TRAVRSE 57°
ALT: 1067M
7 MISEC. 286°
REL TO TRAVRSE 103°
ALT: 1069M
5 MISEC. 258°
REL TO TRAVRSE 115°
ALT: 1197M
2 MISEC. 281°
REL TO TRAVRSE 57°
ALT: 1073M
ALT: 1070M
NO IN P.P.B.
MAP 15

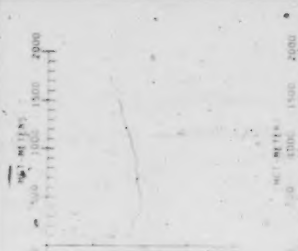




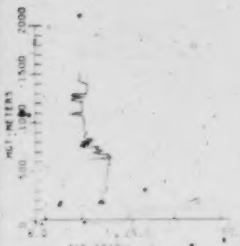
KENTUCKY

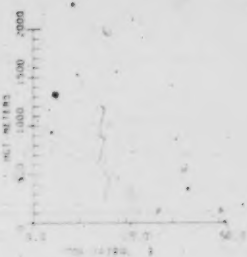



LOUIS
FESTUS

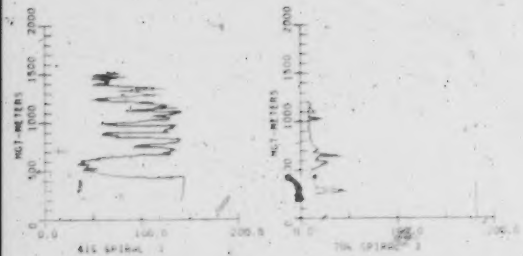


TEMP IN DEGREES C



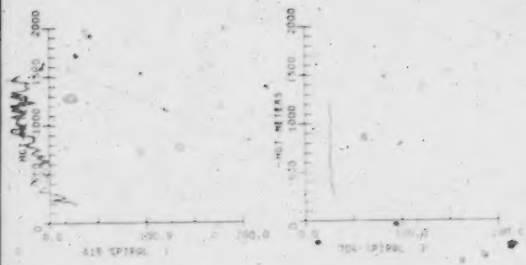


DEWPOINT IN DEGREES C

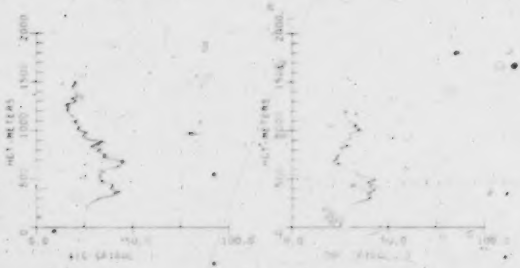


ENC IN $10^3 CM^{-3}$

MAP 13

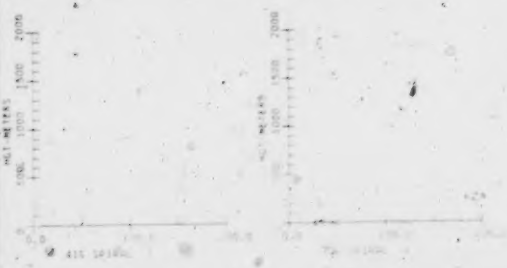


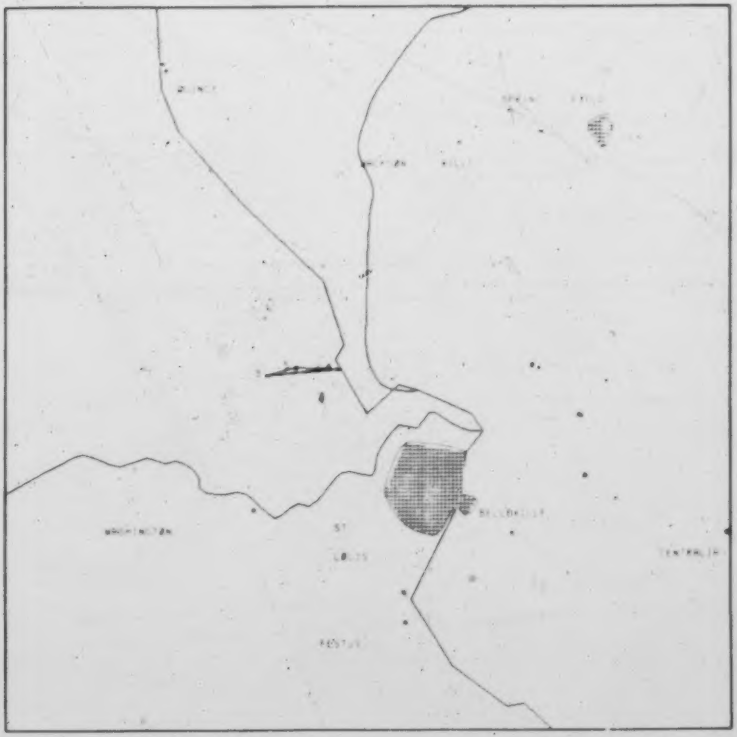
CHARGE IN MILLIVOLTS



BSCAT IN 10^{-6} M^{-1}

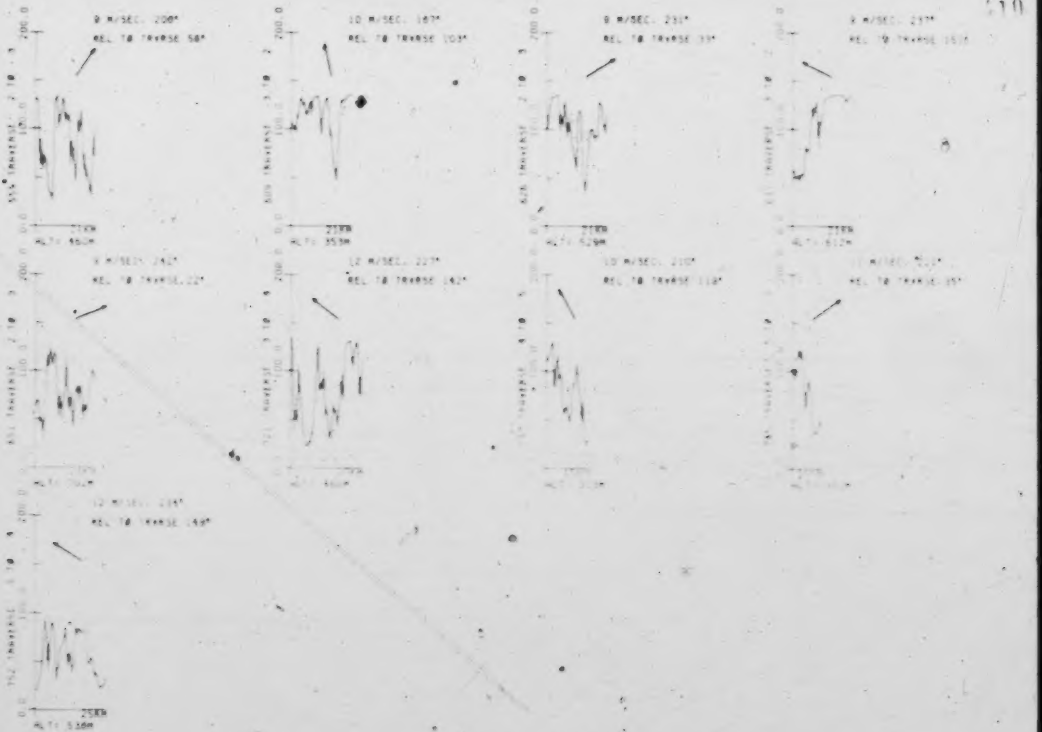
MAP 1





TEMP IN DEGREES C

DEWPOINT IN DEGREES C


9 M/SEC. 200°
REL TO TRANSE 58°
10 M/SEC. 187°
REL TO TRANSE 103°
9 M/SEC. 231°
REL TO TRANSE 33°
9 M/SEC. 257°
REL TO TRANSE 151°
9 M/SEC. 243°
REL TO TRANSE 22°
10 M/SEC. 227°
REL TO TRANSE 142°
10 M/SEC. 210°
REL TO TRANSE 118°
REL TO TRANSE 35°
12 M/SEC. 234°
REL TO TRANSE 149°
25KTS
ALT: 5,160M
CNC IN 10²CM⁻³
MAP 15

9 M/SEC. 208°
REL TO TRAVRSE 58°
10 M/SEC. 187°
REL TO TRAVRSE 103°
9 M/SEC. 231°
REL TO TRAVRSE 33°
9 M/SEC. 237°
9 M/SEC. 242°
REL TO TRAVRSE 22°
12 M/SEC. 227°
REL TO TRAVRSE 142°
10 M/SEC. 210°
REL TO TRAVRSE 114°
11 M/SEC. 821°
REL TO TRAVRSE 95°
555 TRAVERSE
609 TRAVERSE
651 TRAVERSE
CHARGE IN MILLIVOLTS

BSCAS IN $10^{-5}M^{-1}$

MAP 16

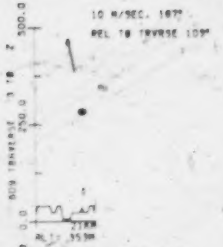
REL TO TRVRSE 58°
10 M/SEC. 187°
REL TO TRVRSE 103°
REL TO TRVRSE 33°
REL TO TRVRSE 22°
REL TO TRVRSE 142°
REL TO TRVRSE 119°
REL TO TRVRSE 85°
ALT= 530M

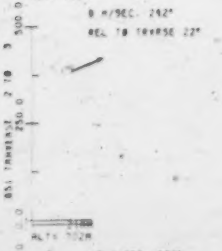
O3 IN P.P.B.

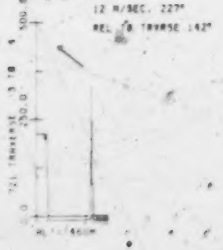
9 M/SEC. 208°
REL TO TRANSE 58°
ALT: 460M
10 M/SEC. 197°
REL TO TRANSE 103°
ALT: 355M
9 M/SEC. 231°
REL TO TRANSE 33°
ALT: 539M
9 M/SEC. 237°
REL TO TRANSE 151°
ALT: 611M
9 M/SEC. 202°
REL TO TRANSE 22°
12 M/SEC. 227°
REL TO TRANSE 262°
10 M/SEC. 210°
REL TO TRANSE 112°
11 M/SEC. 221°
REL TO TRANSE 35°
ALT: 535M

N82 IN P.P.B.

MAP 16



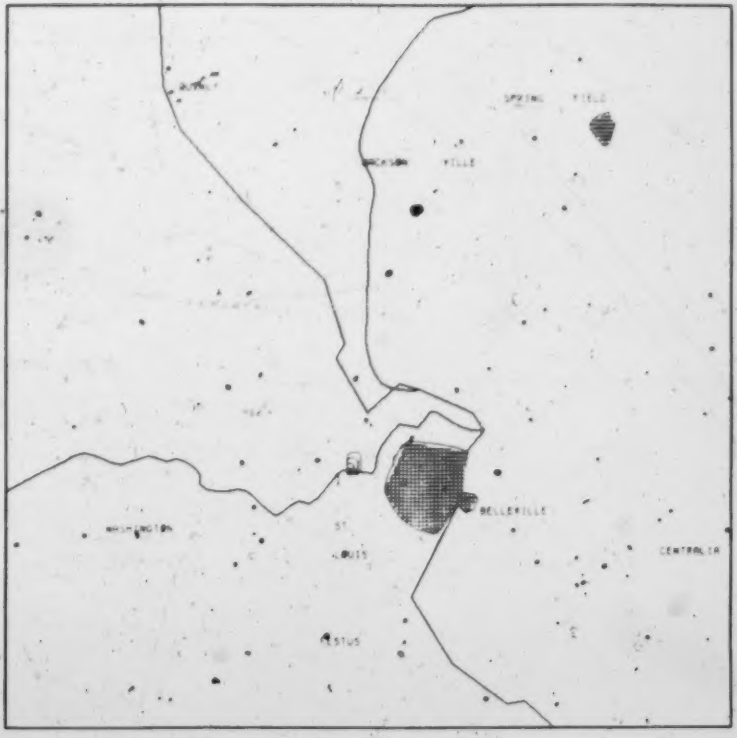


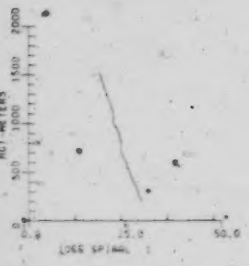


SEE IN P.P.B. MAP 1

6347277g

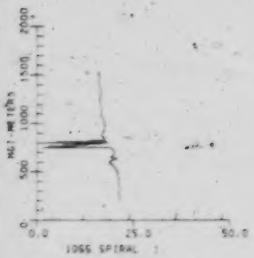
MAP 14





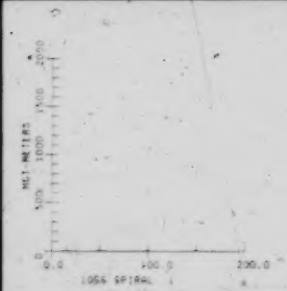
TEMP IN DEGREES C

MAP 14



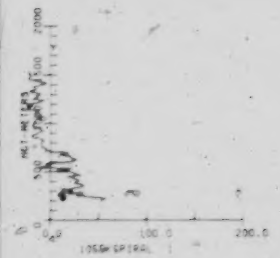
DEWPOINT IN DEGREES C

MAP 14



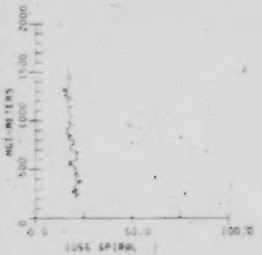
CNC IN $10^{9}CM^{-3}$

MAP 14



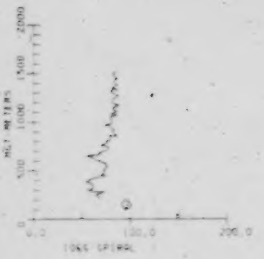
CHARGE IN MILLIVOLTS

MAP 14



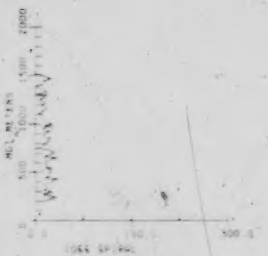
BSCAT IN $10^{-5}M^{-1}$

MAP 14



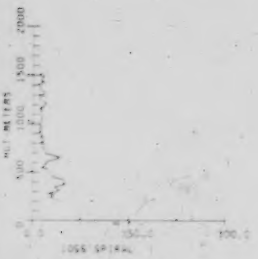
03 IN P.P.B.

MAP 14



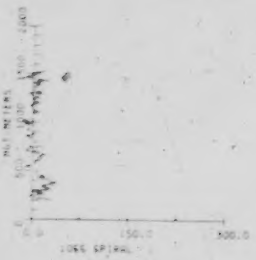
NØ IN P.P.B.

MAY 14



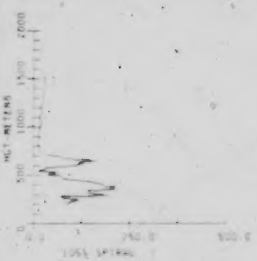
NOT IN P.P.B.

MAP 13



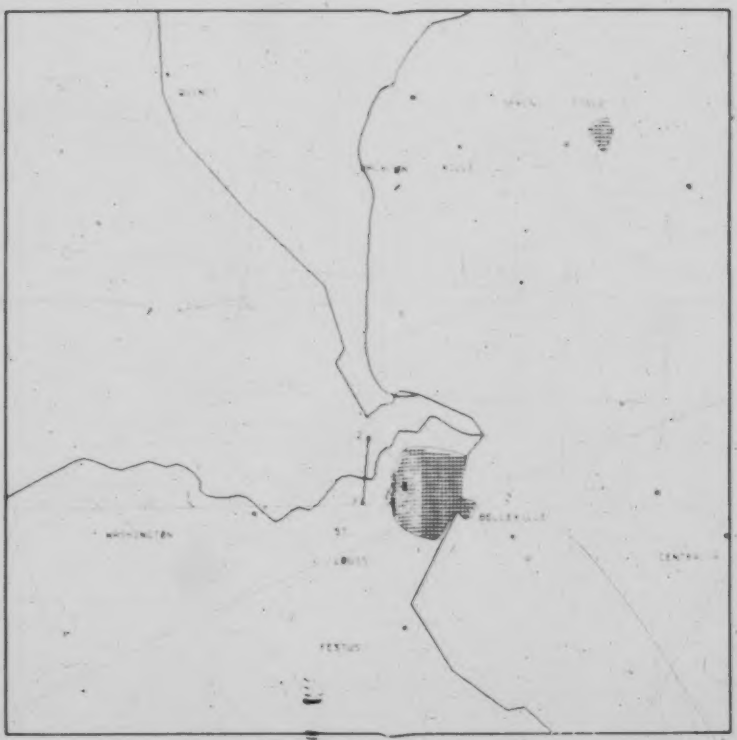
N02 IN P.P.B.

MAP 14



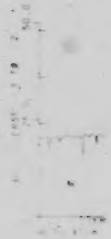
S22 IN P.P.B.

MAP 14



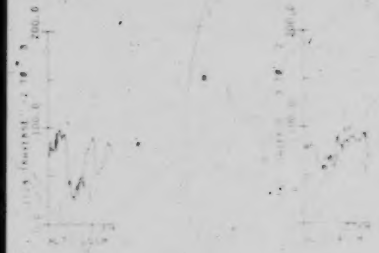
TEMP IN DEGREES C

MAP 17



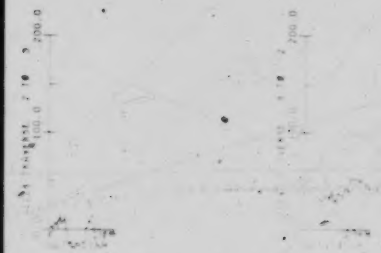
DEWPOINT IN DEGREES C

MAP 17



CNC IN $10^3 CM^{-3}$

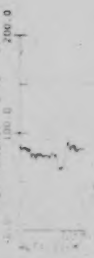
MAP 17



CHARGE IN MILLIVOLTS

MAP 17

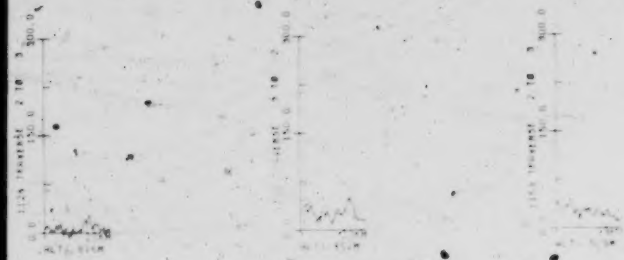
BSCAT (X 10⁻⁴ m⁻¹)
MAP 17



NO IN P.P.B.

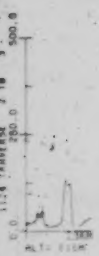
MAP 17

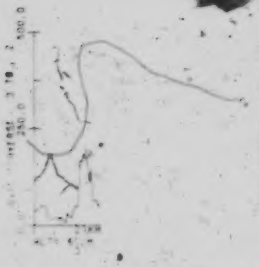
NOX IN P.P.B.

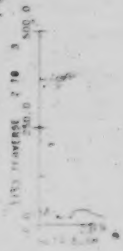


N02 IN P.P.B.

MAP 17





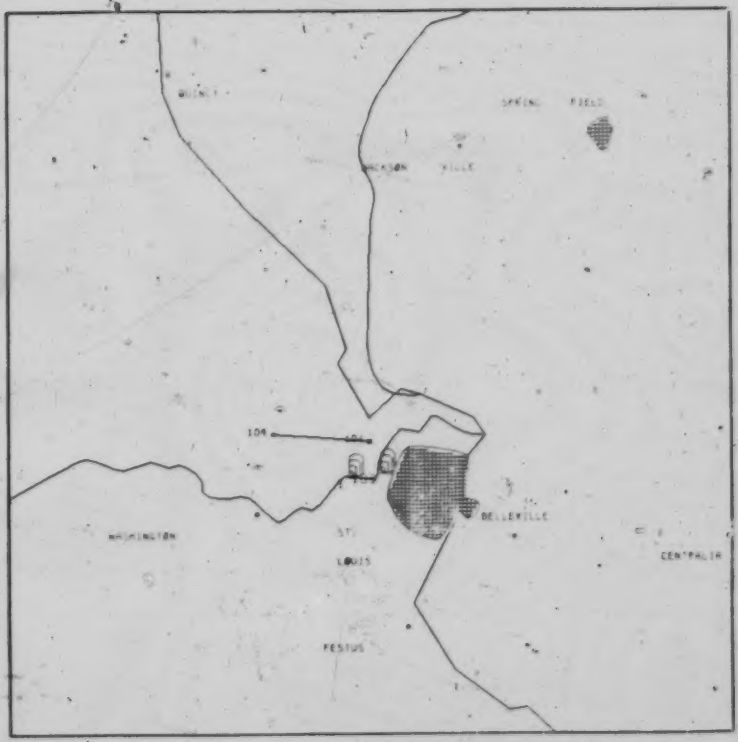


S&2 IN P.P.B.

MAP 17

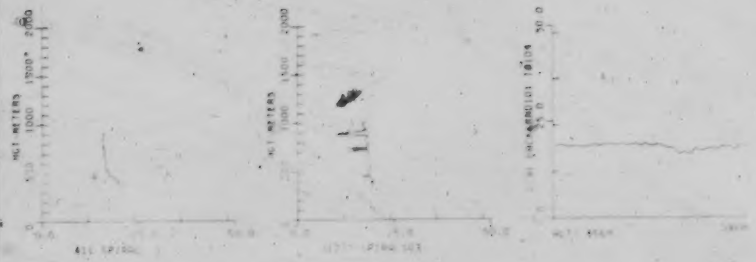
16357876

MAP 15



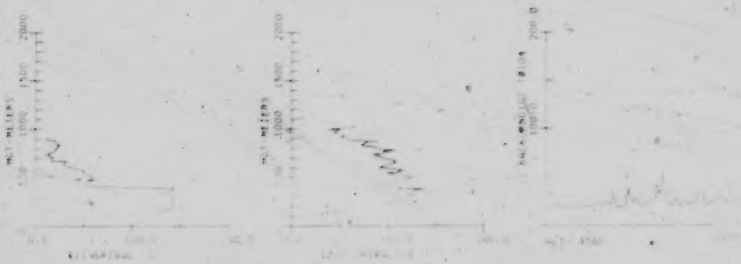
TEMP IN DEGREES C

MAP 1



DEWPOINT IN DEGREES C

MAP 15

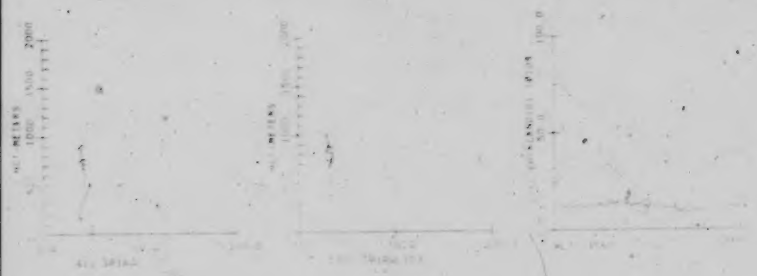


CNC IN $10^{3}/CM^{3}$

MAP 15

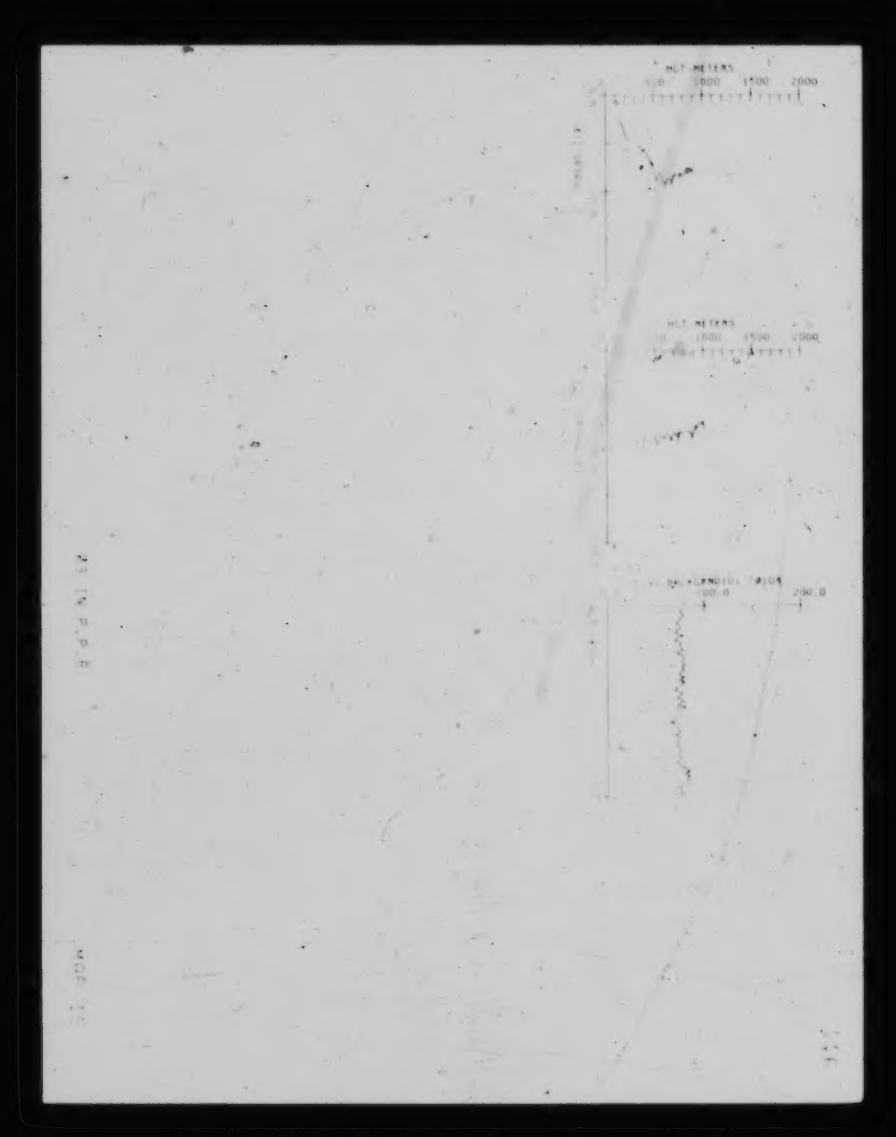
CHARGE IN MILLIVOLTS

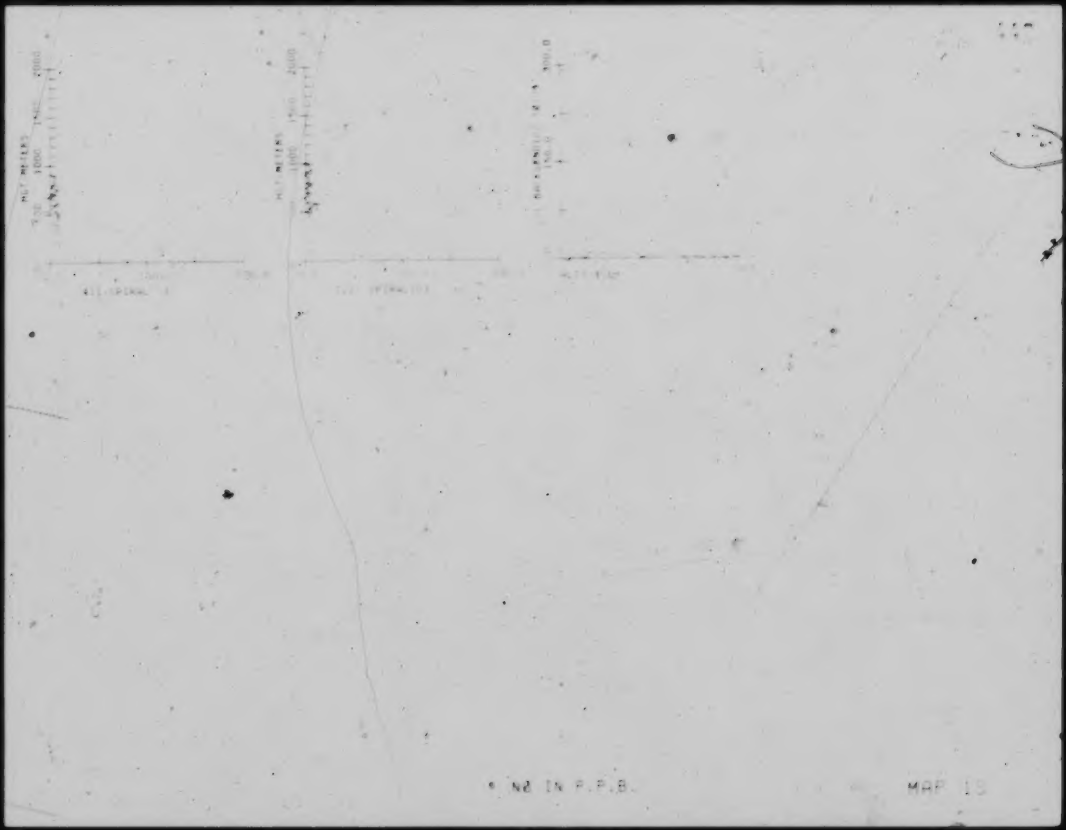
MAP 15

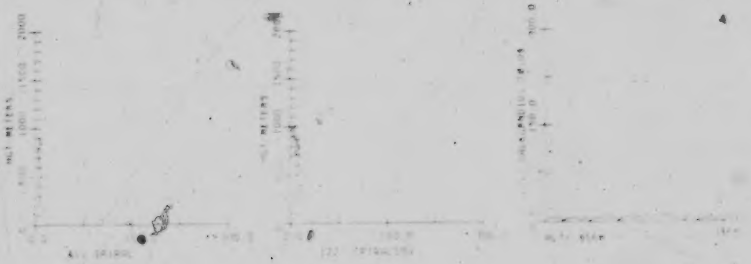


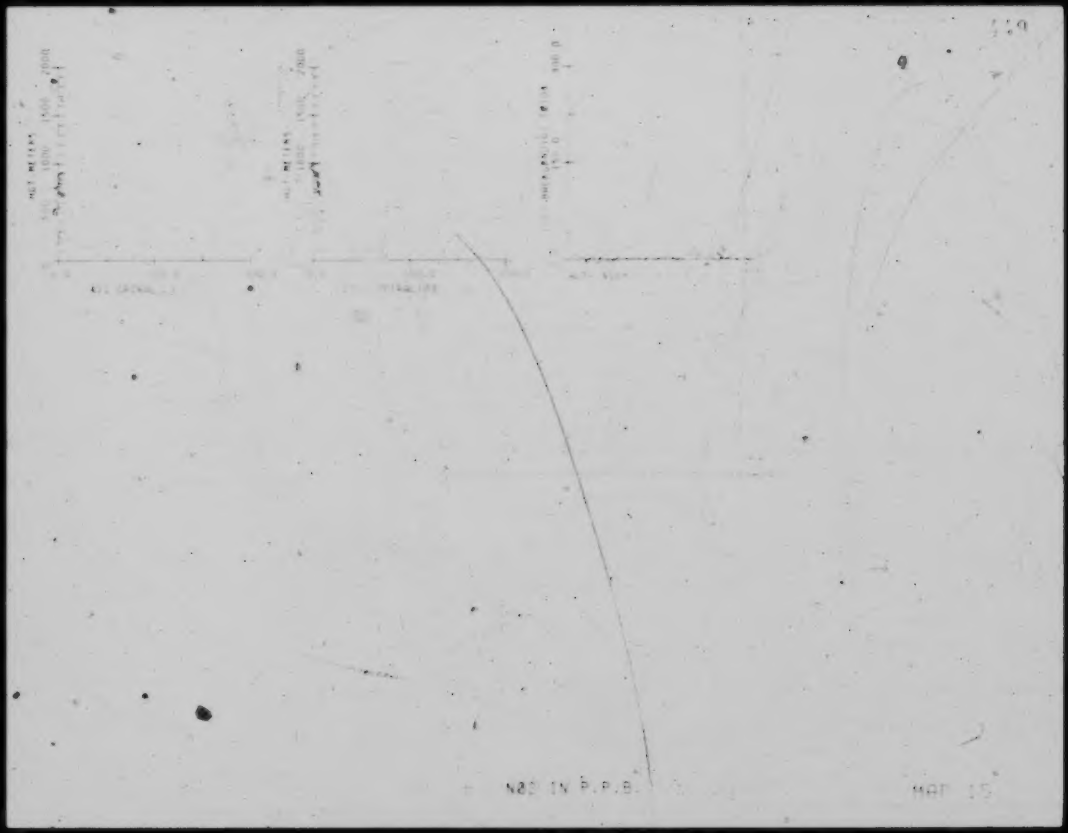
BSCAT IN $10^{-4}M^{-1}$

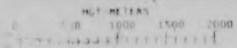
MAR 1

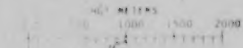

HGT METERS
1000
1500
2000
HGT METERS
1000
1500
2000
100.0
200.0


* N2 IN P.P.B.
MAP 19



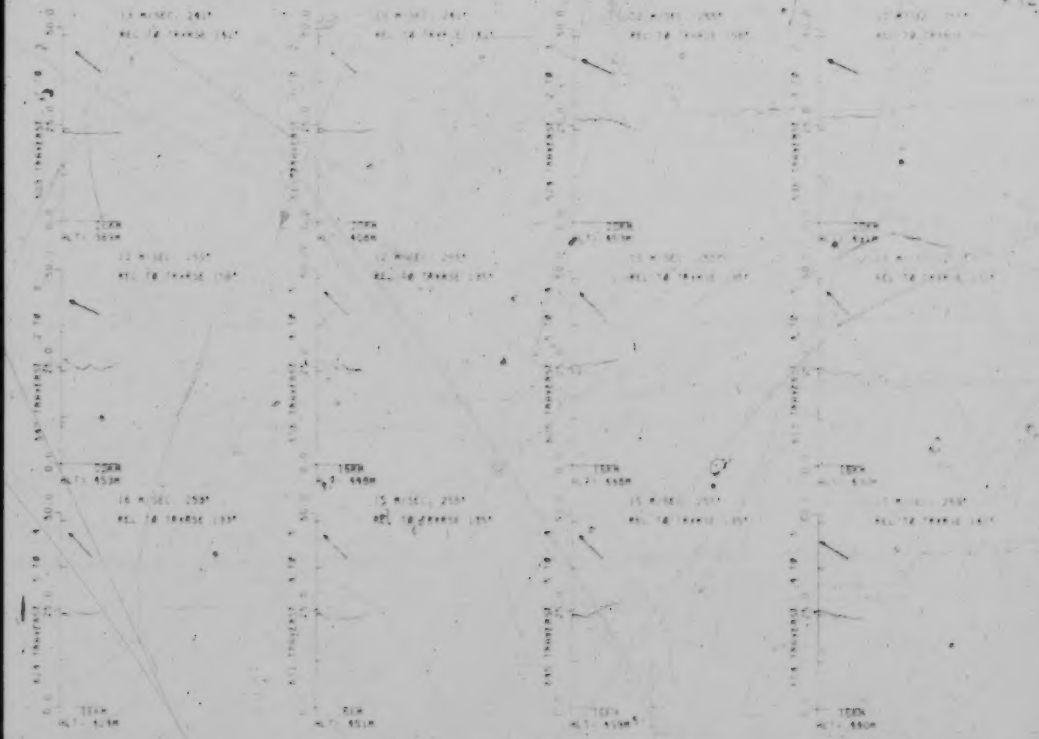



HGT METERS
1000
1500
2000


HGT METERS
1000
1500
2000

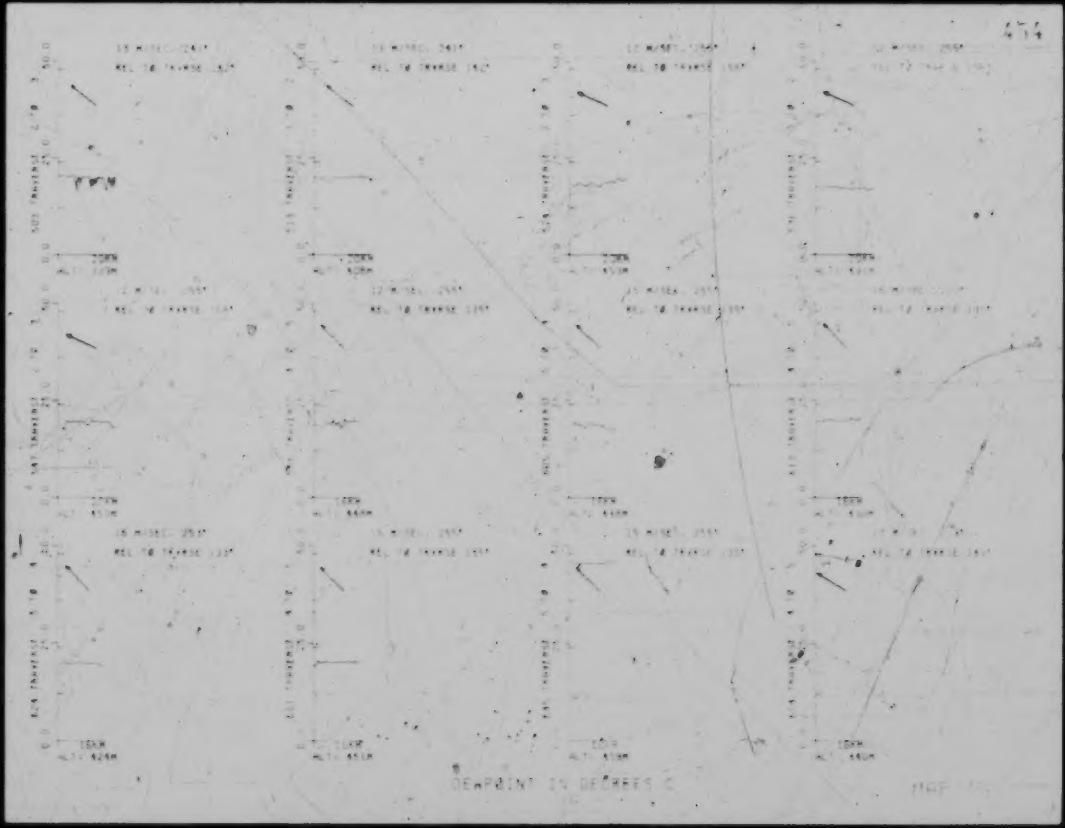
250.0
500.0

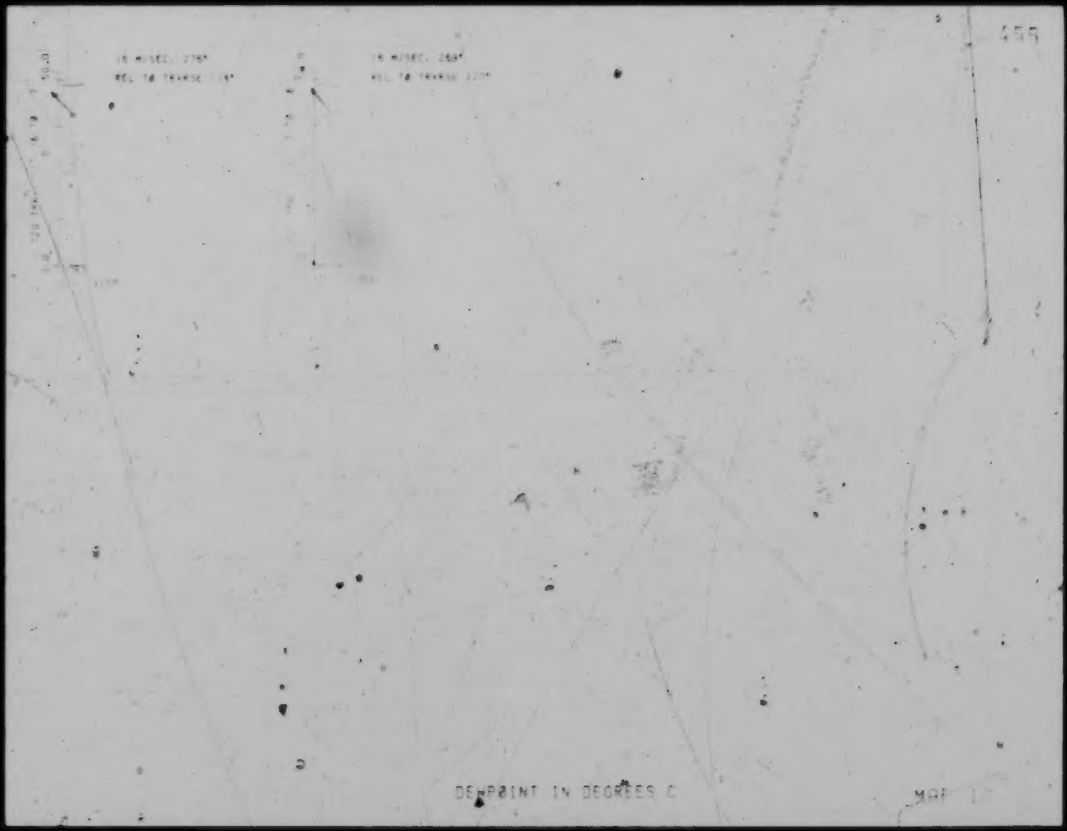
FESTUS

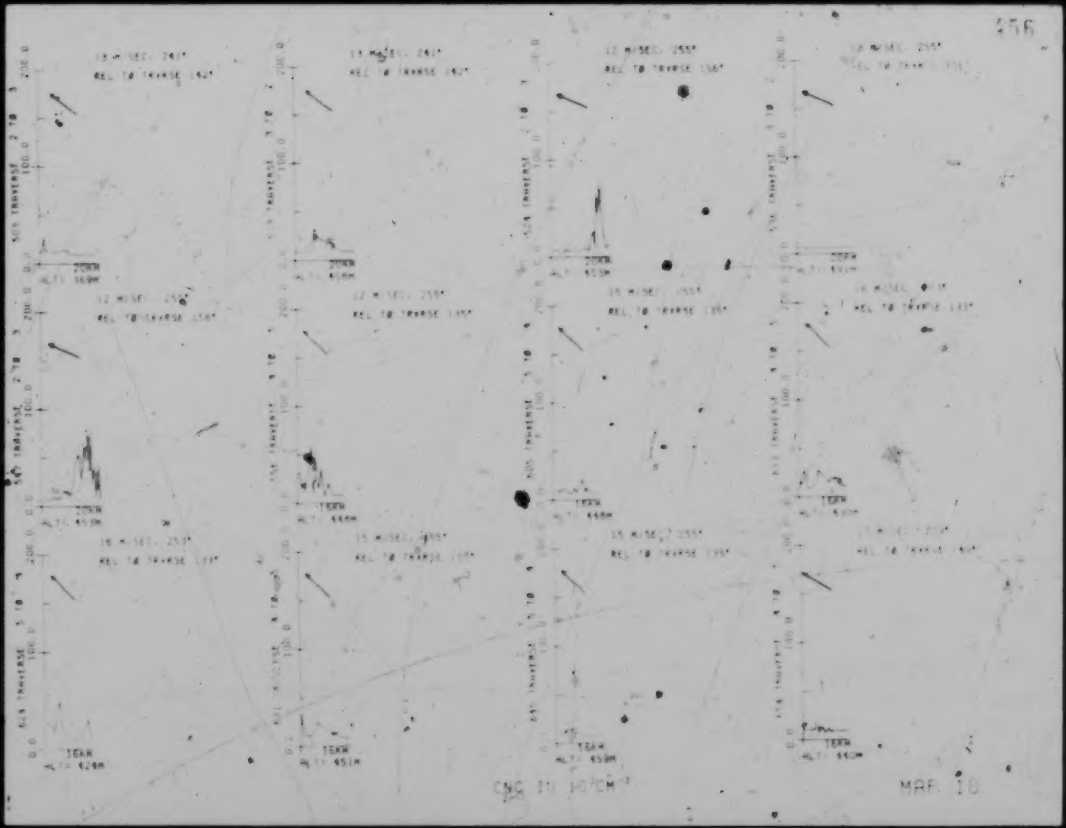


TEMP IN DEGREES C

TEMP IN DEGREES C

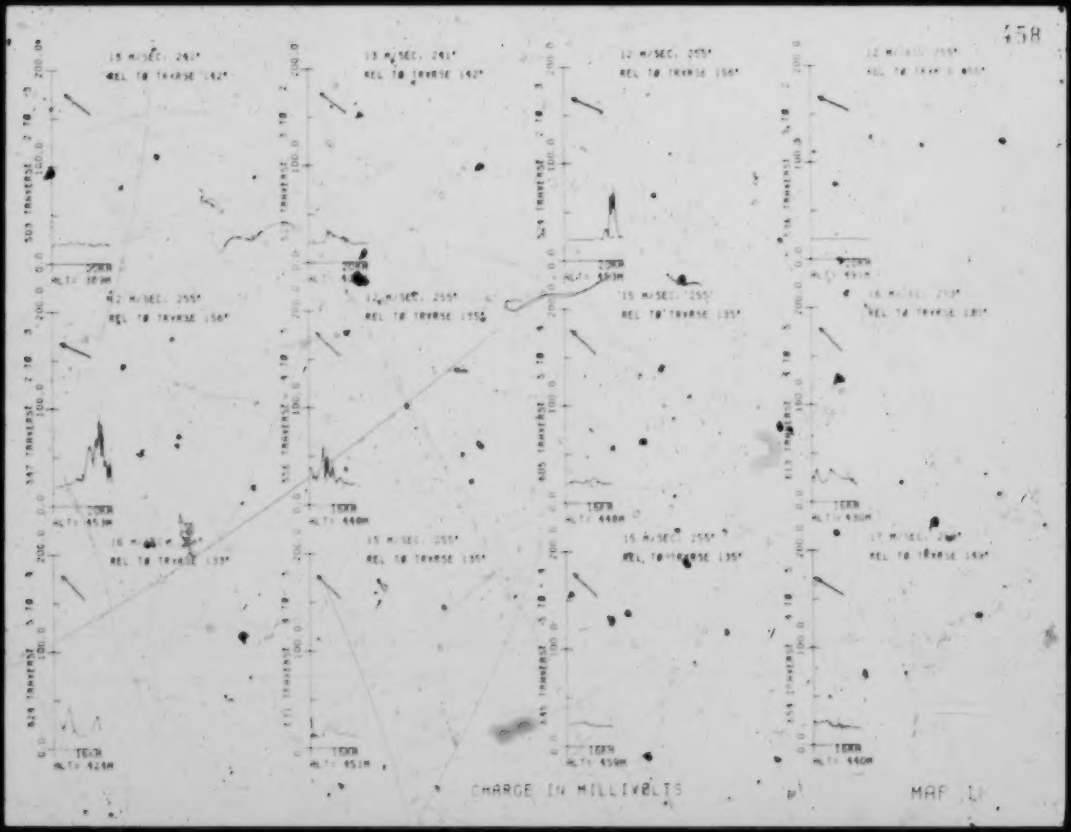

DEWPOINT IN DEGREES C

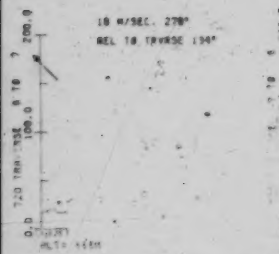

DEWPOINT IN DEGREES C



13 M/SEC. 241°
REL TO TRAVERSE 142°
12 M/SEC. 255°
REL TO TRAVERSE 156°
20KM
16KM
CNC IN 10 CM
MAR. 18

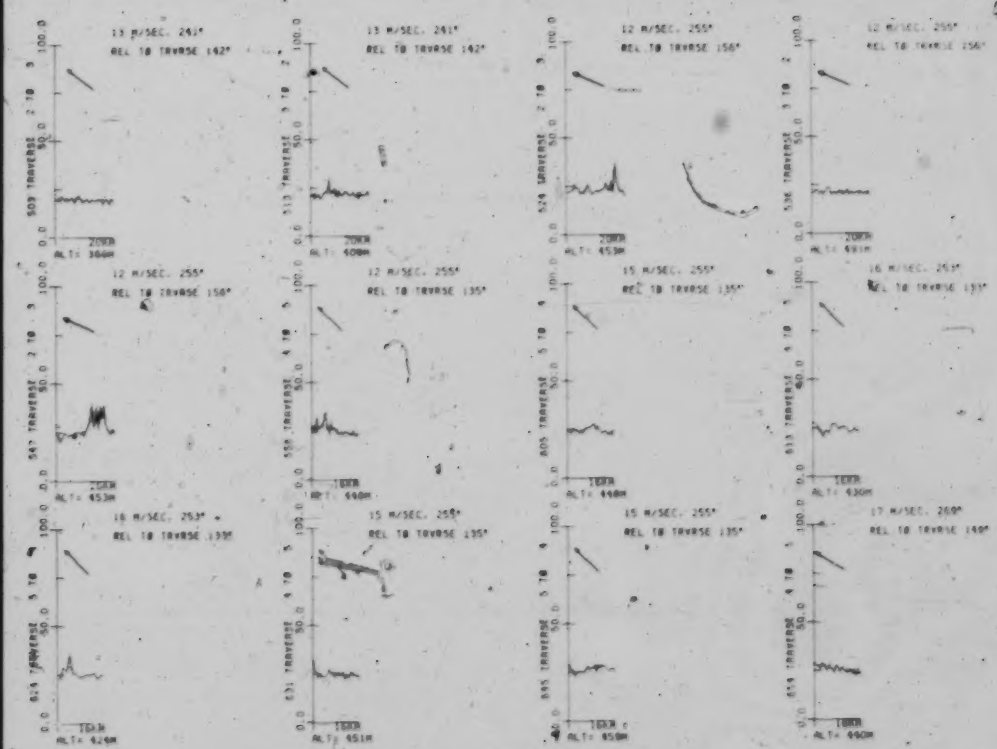
16 M/SEC. 276°
REL TO TRANSE 138°
16 M/SEC. 269°
REL TO TRANSE 131°
100.0
100.0
CNC IN 10⁵CM⁻³
MAP 17


CHARGE IN MILLIVOLTS
MAP



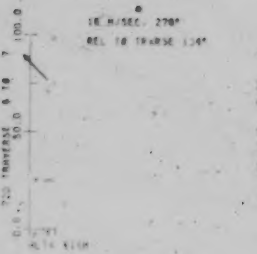
CHARGE IN MILLIVOLTS

MAP 18



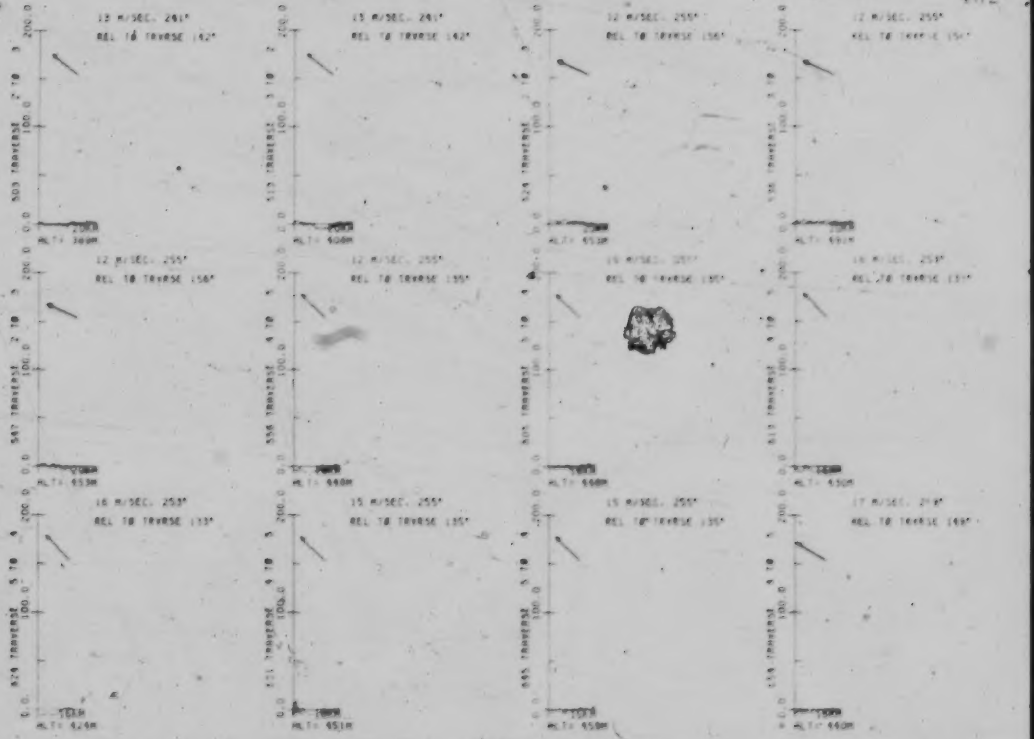
BSCAT IN $10^{-5}M^{-1}$

MAP 18



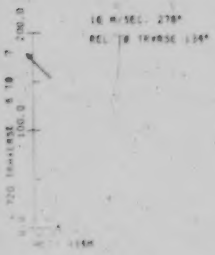
BSCAT IN $10^{-5}M^{-1}$

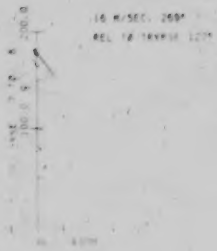
MAP 18

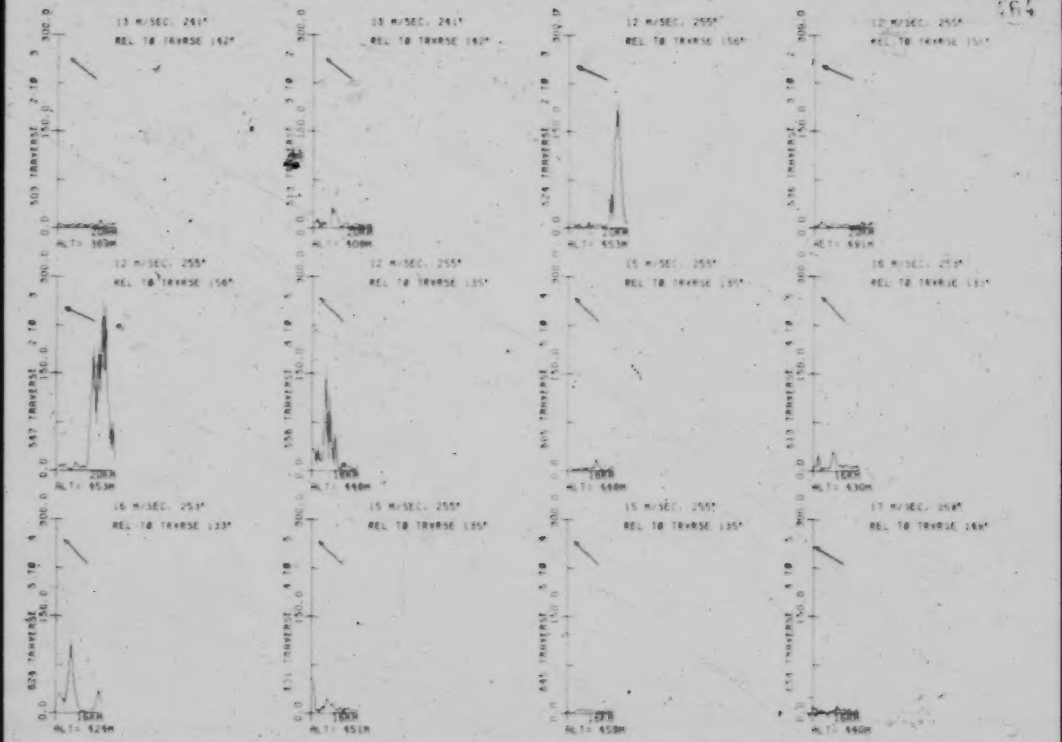


03 IN P.P.B.

MAP 10


16 M/SEC. 278°
REL TO TRVRSE 134°
200.0
100.0
720 TRAVERSE 6 TO 7


16 M/SEC. 269°
REL TO TRVRSE 127°
200.0
100.0

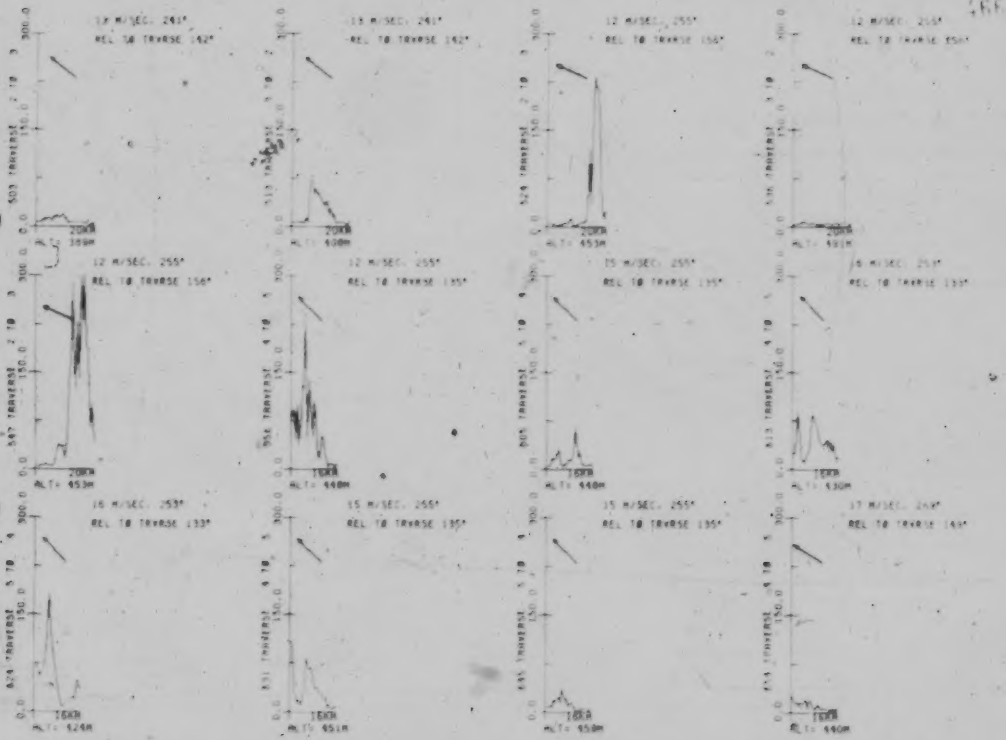


NO IN P.P.B.

MAP 18

NØ IN P.P.B.

MAP 1A

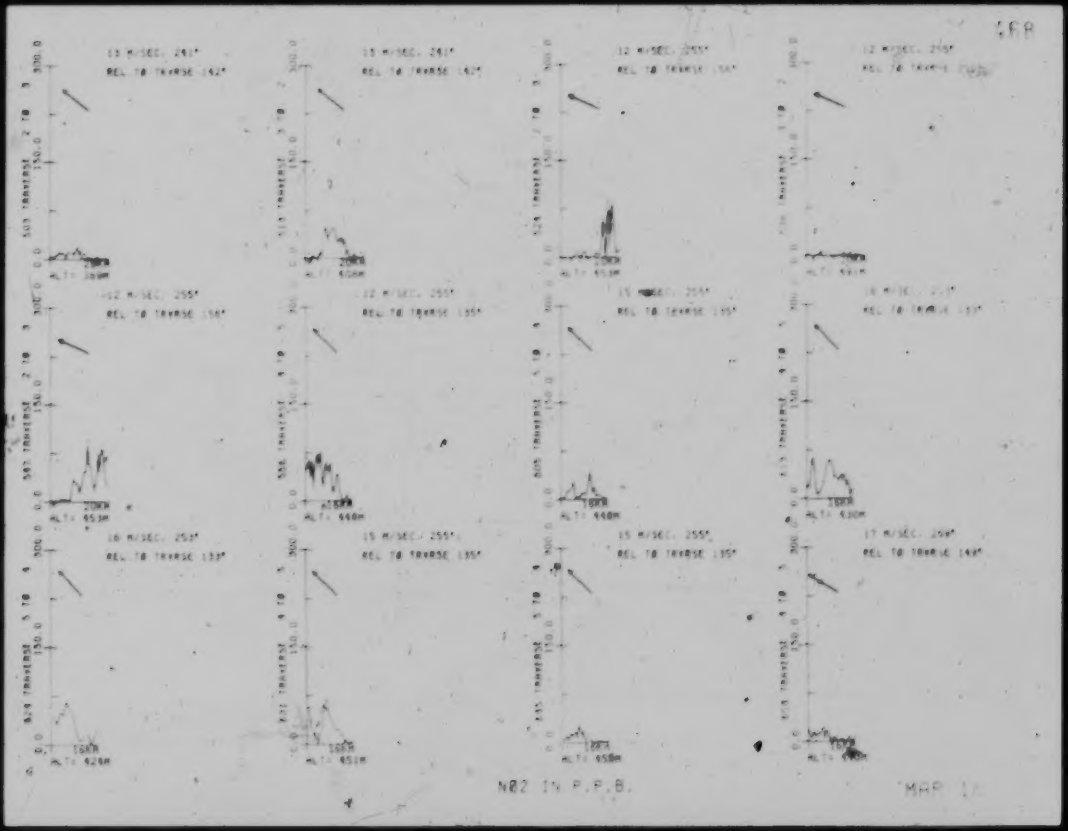


N2X IN P.P.B.

MAP 18

NOX IN P.P.B.

MAP 18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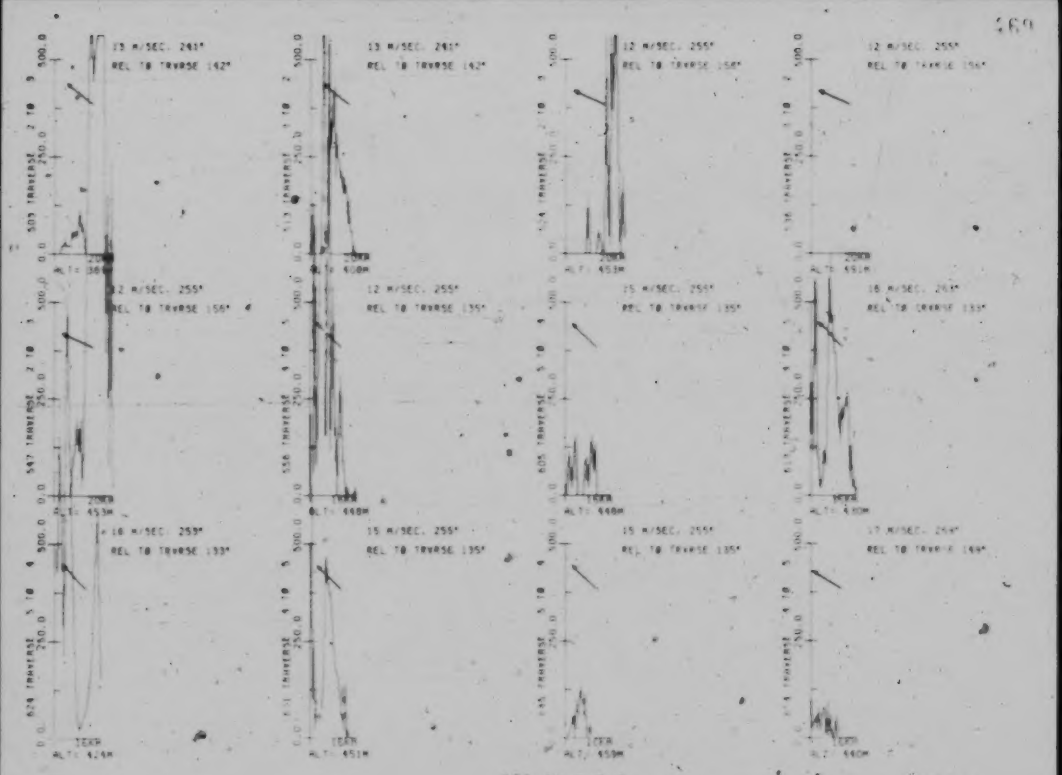
REL TO TRVRSE 142°
12 M/SEC. 255°
REL TO TRVRSE 156°
16 M/SEC. 253°
REL TO TRVRSE 133°
15 M/SEC. 255°
REL TO TRVRSE 135°
12 M/SEC. 255°
REL TO TRVRSE 135°
15 M/SEC. 255°
REL TO TRVRSE 135°
17 M/SEC. 259°
REL TO TRVRSE 149°
ALT= 453M
ALT= 440M
ALT= 430M
ALT= 424M
ALT= 451M
ALT= 450M
N02 IN P.P.B.
MAP 1

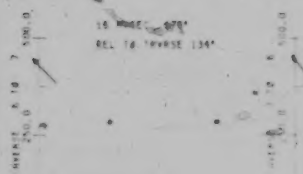


502 IN P.P.B.

MAP 10

N02 IN P.P.B.

MAP 18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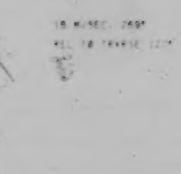
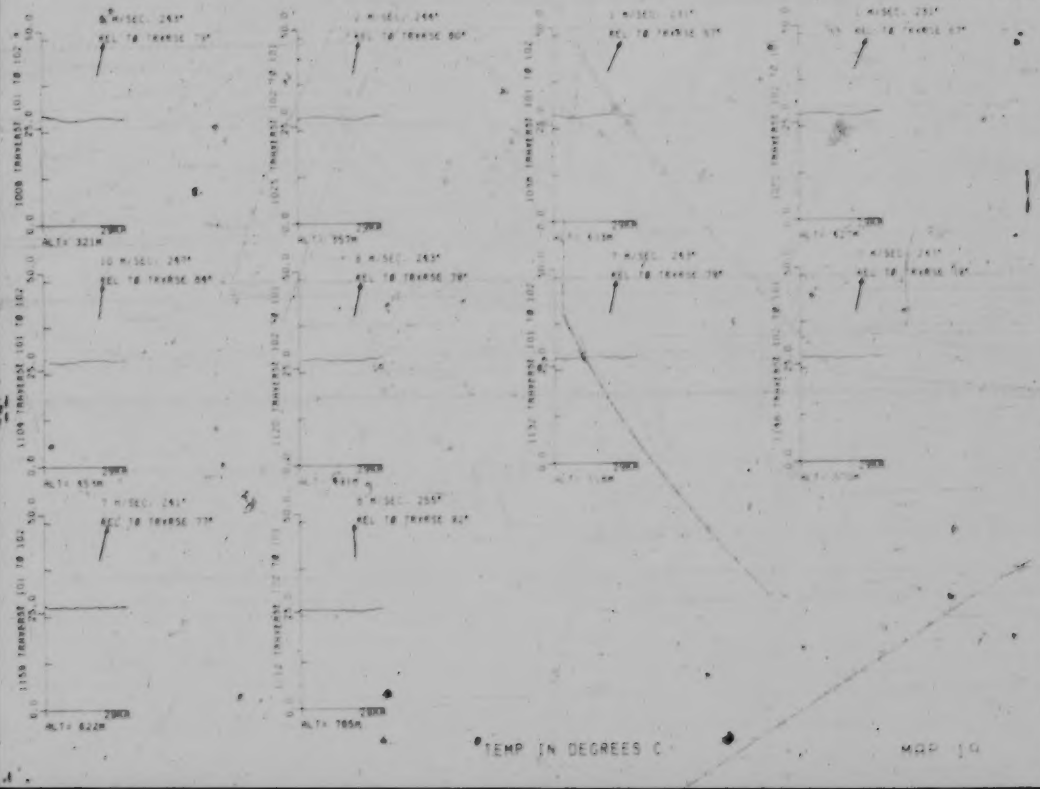
REL TO TRANSE 134°

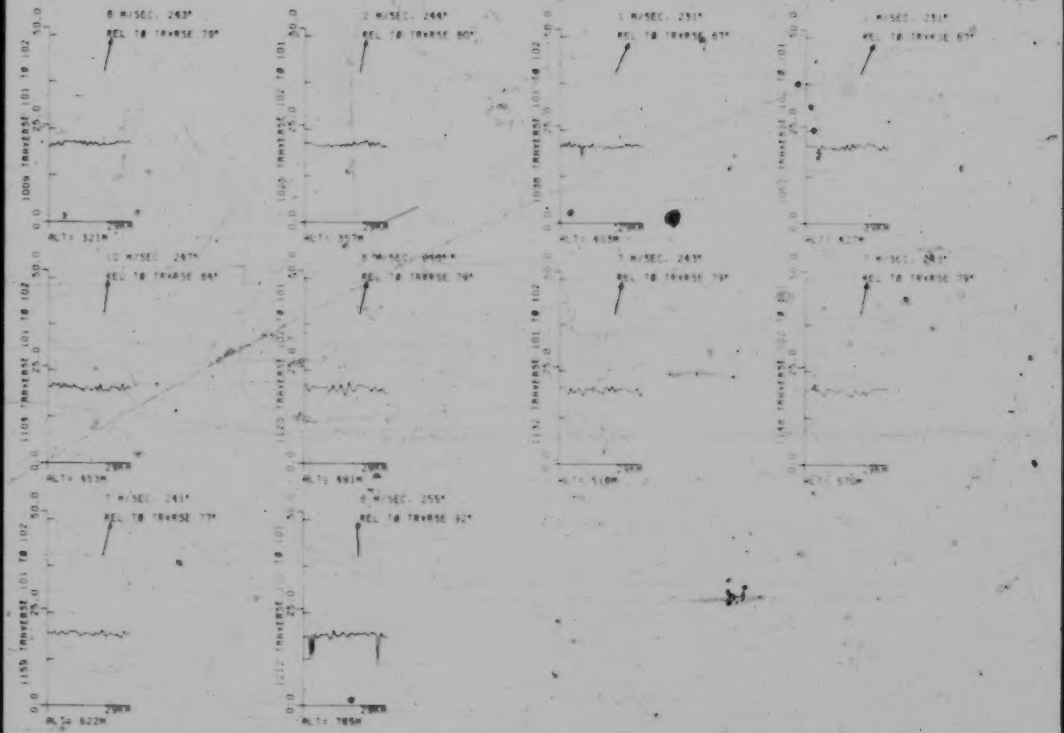

10 KNOTS 249°
REL TO TRANSE 127°

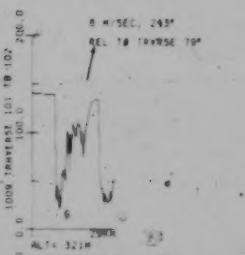
D0672876

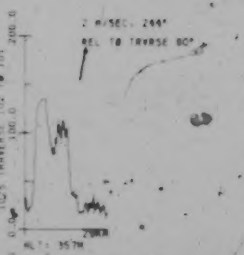
MAP 19

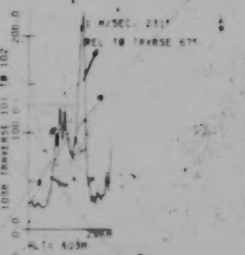
M 14

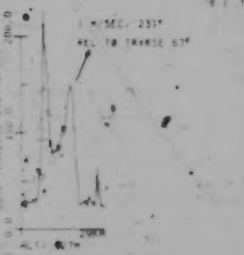

TEMP IN DEGREES C
MAP 19

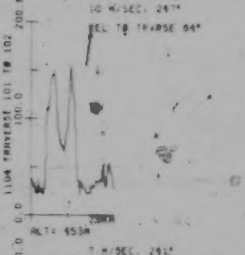

DEWPOINT IN DEGREES C
MAP 19

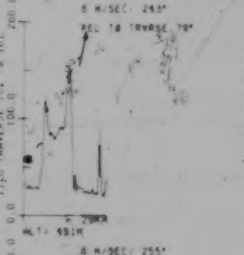


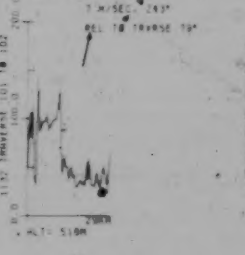


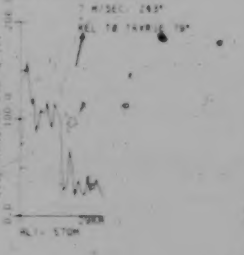


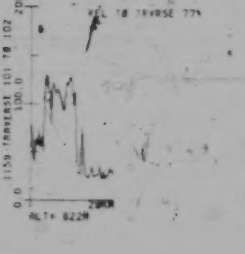


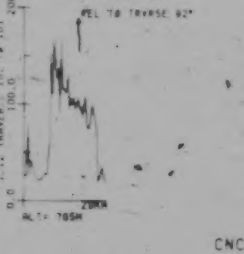






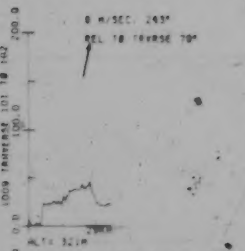


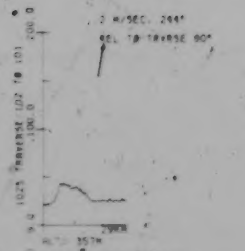


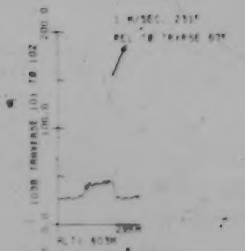


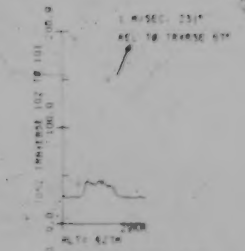
CNC IN $10^3 CM^{-3}$

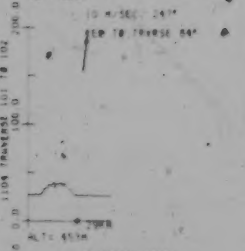
MAP 19

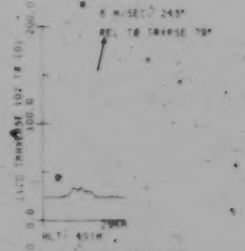


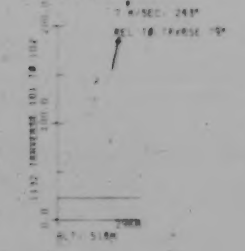


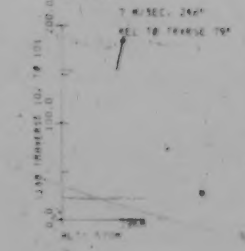


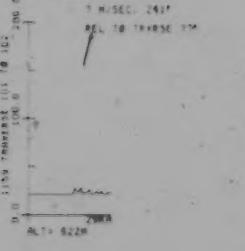


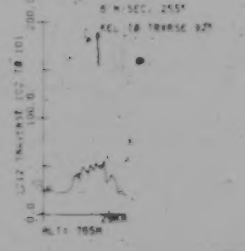












CHARGE IN MILLIVOLTS

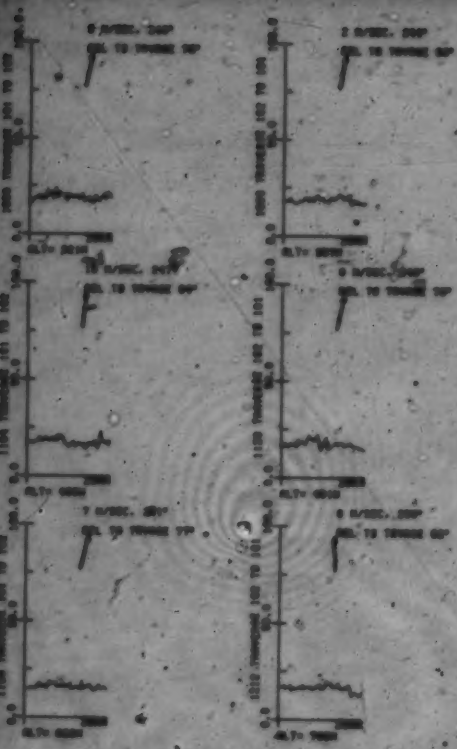
MAR 19

INDEX

Description/Date	Document Pages	Format	Starting X - Y	Item
Title, Index and Preface Pages	1-6	001		B-1
Part I - Meteorology Examination, Incorporated Data	7	001		B-7
Map 1 602/7-1-76	8-39	001		B-8
Map 2 603/7-2-76	40-71	001		C-20
Map 3 605/7-5-76	72-103	001		E-12
Map 4 607/7-8-76	104-135	001		G-4
Map 4 608/7-7-76	136-167	001		G-15
Map 5 609/7-7-76	168-199	001		M-6
Map 5 613/7-14-76	168-199	001		I-7
Map 6 613/7-14-76	168-199	001		I-18
Map 7 614/7-14-76	168-199	001		K-8
Map 8 615/7-15-76	209-239	001		L-9
Map 8 615/7-15-76	220-230	001		L-20
Map 7 619/7-18-76	231-241	001		M-11
Map 8 620/7-18-76	242-252	002		B-4
Map 9 619/7-18-76	253-263	002		B-15
Map 9 621/7-18-76	264-274	002		C-6
Map 10 620/7-18-76	275-285	002		C-17
Map 11 621/7-18-76	286-296	002		D-8
Map 10 622/7-20-76	297-307	002		D-19
Map 12 622/7-20-76	308-329	002		E-10
Map 11 625/7-23-76	330-340	002		F-12
Map 12 626/7-23-76	341-351	002		G-3
Map 13 625/7-23-76	352-372	002		G-14
Map 14 626/7-23-76	373-383	002		M-15
Map 15 627/7-24-76	384-395	002		I-6
Map 13 632/7-26-76	396-406	002		I-18
Map 16 632/7-26-76	407-417	002		J-9
Map 14 634/7-27-76	418-428	002		J-20
Map 17 634/7-27-76	429-439	002		K-11
Map 15 635/7-28-76	440-450	002		L-2
Map 18 635/7-28-76	451-471	002		L-13
Map 19 636/7-28-76	472-482	002		M-14
Map 16 637/7-30-76	483-493	003		B-7
Map 20 637/7-30-76	494-514	003		B-18
Map 21 638/7-30-76	515-535	003		C-19
Part II - University of Washington Data	536	003		D-20
Map 1 6-27-76	537-548	003		E-1
Map 2 7-5-76	549-559	003		E-13
Map 3 7-6-76	559-570	003		E-19
Map 2 7-5-76	561-568	003		F-6
Map 3 7-7-76	569-572	003		F-11
Map 4 7-7-76	573-583	003		F-17
Map 4 7-9-76	584-589	003		G-8
Map 5 7-9-76	590-600	003		G-14

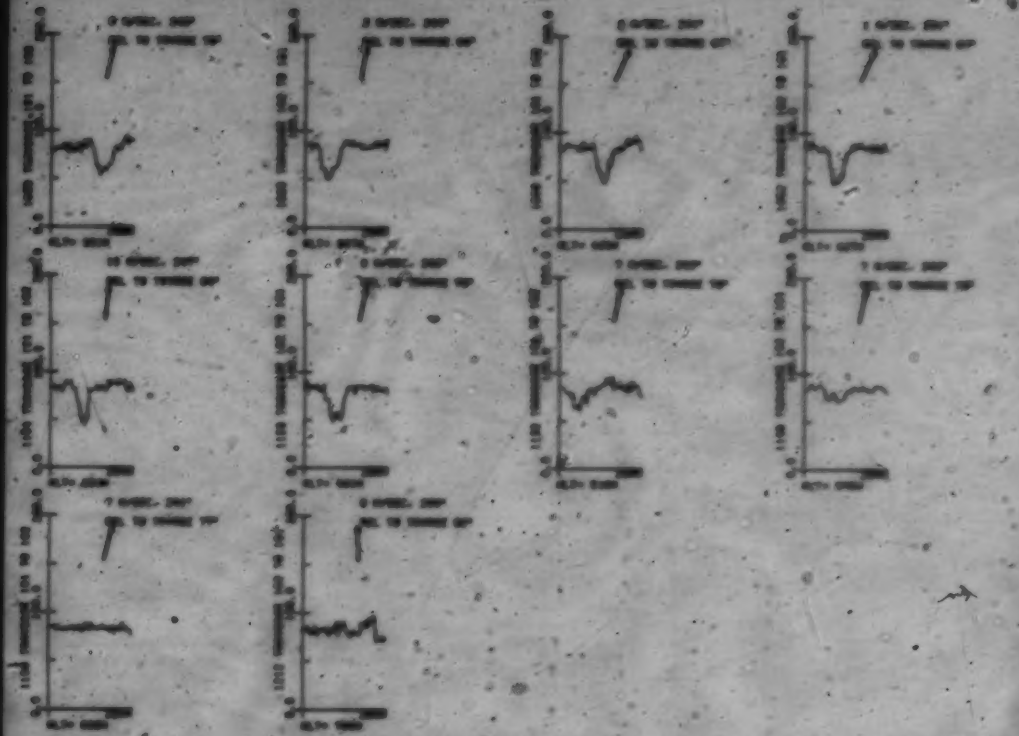
M 19

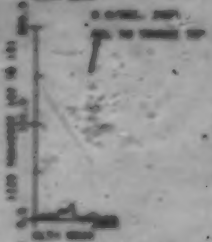
Description/Date		Document Pages	Frame #	Starting Row and Column
Map 5	7-9&10-76	601-606	003	H-5
Map 6	7-9&10-76	607-612	003	H-11
Map 6	7-12-76	613-618	003	H-17
Map 7	7-12-76	619-624	003	I-3
Map 8	7-13-76	625-630	003	I-9
Map 7	7-14-76	631-636	003	I-15
Map 9	7-14-76	637-642	003	J-1
Map 8	7-15-76	643-648	003	J-7
Map 10	7-15-76	649-659	003	J-13
Map 9	7-18-76	660-665	003	K-4
Map 10	7-18-76	666-671	003	K-10
Map 11	7-18-76	672-677	003	K-16
Map 12	7-18-76	678-683	003	L-2
Map 11	7-20-76	684-689	003	L-8
Map 13	7-20-76	690-695	003	L-14
Map 12	7-23-76	696-701	003	L-20
Map 14	7-23-76	702-707	003	M-6
Map 15	8-3-76	708-713	003	M-12
Form 2220-1		714	003	M-18

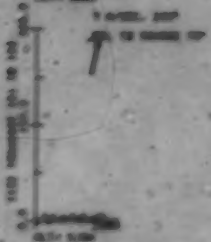


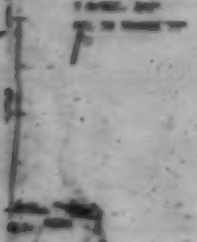
BSCAT IN 10^{-6} M^{-1}

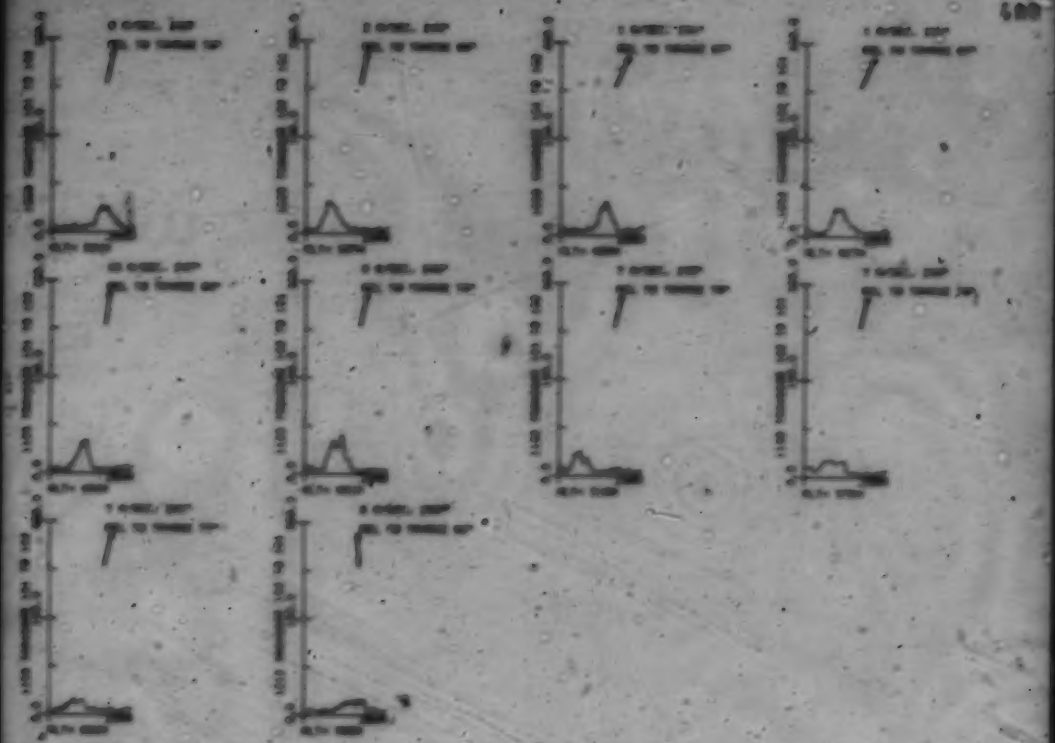
MAP 19











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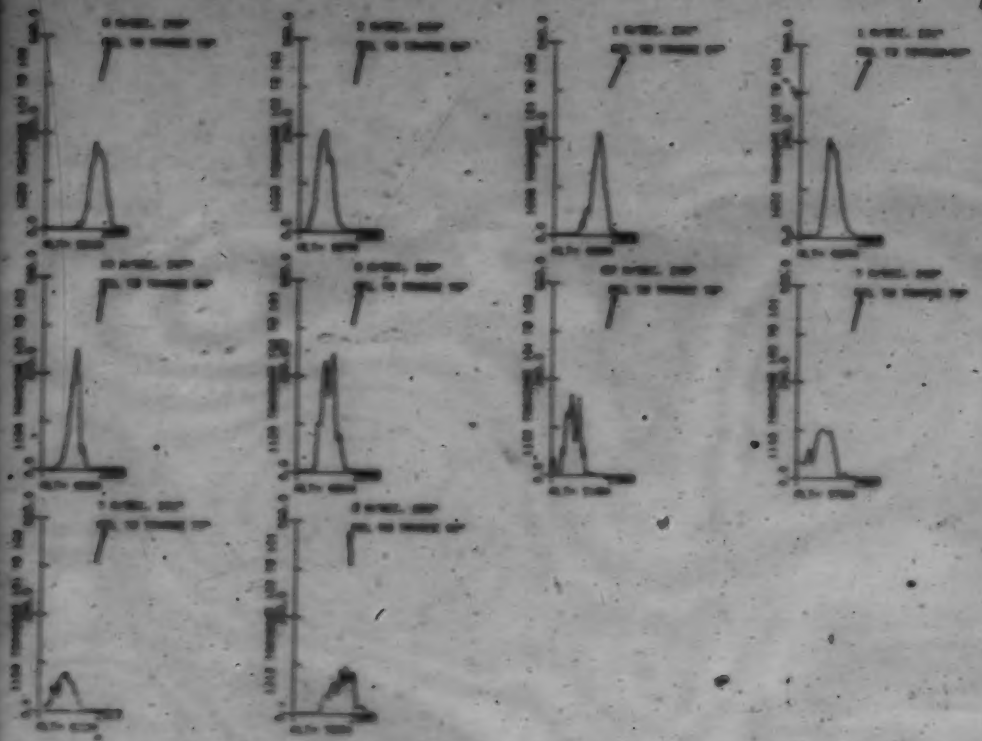

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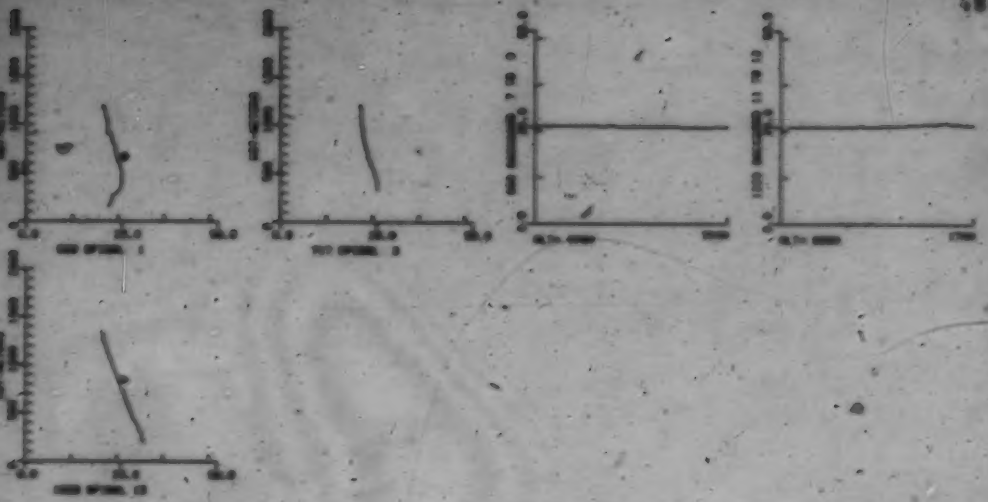
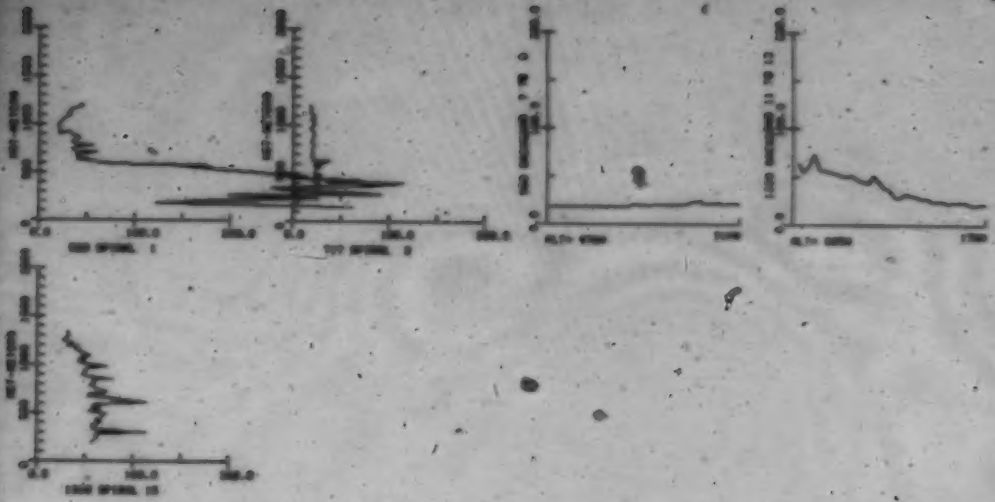


TEMP IN DEGREES C

MAP 16

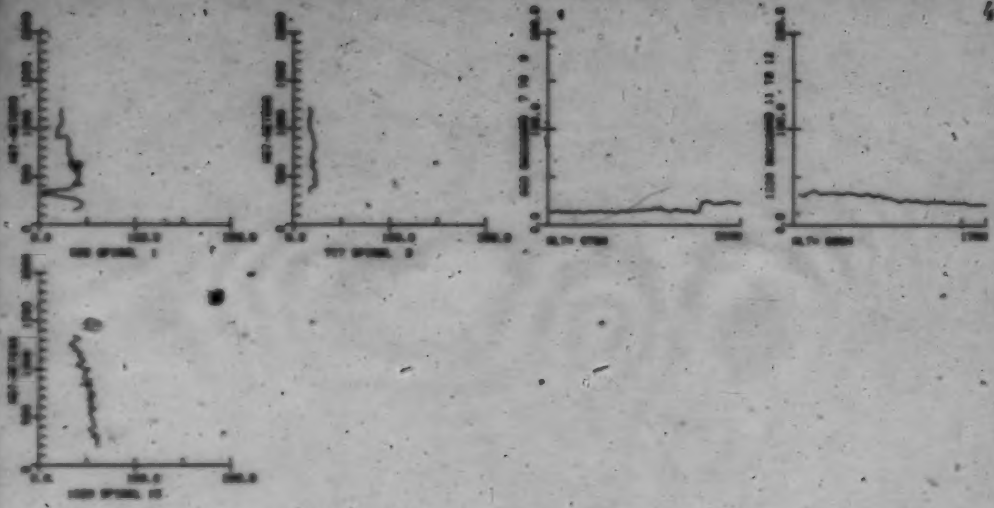
DEWPOINT IN DEGREES C

MAP 16



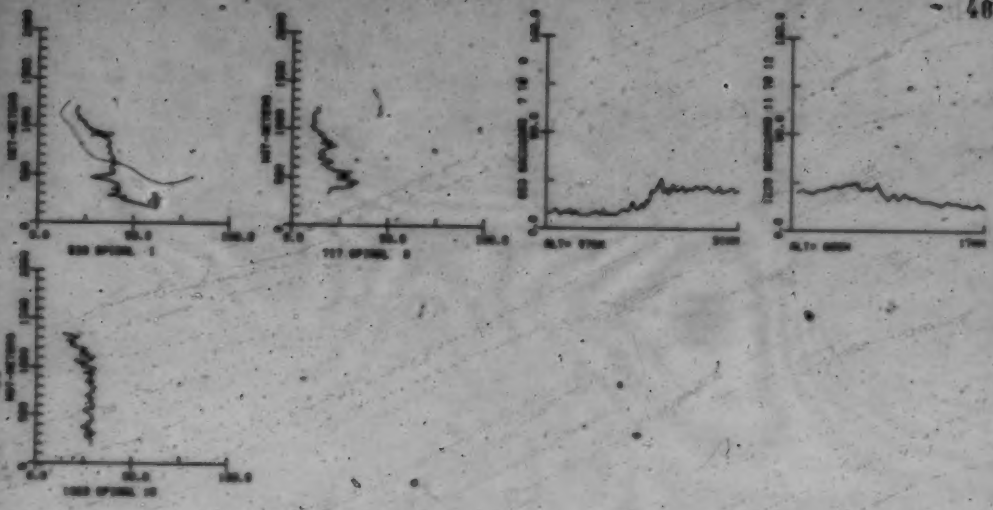
CNC IN $10^{6}CM^{-3}$

MAP 16



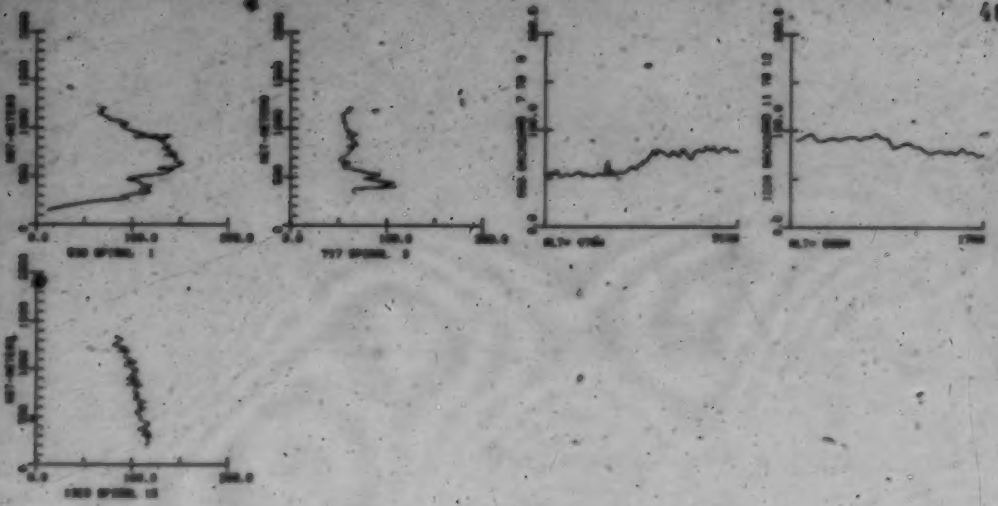
CHANGE IN MILLIVOLTS.

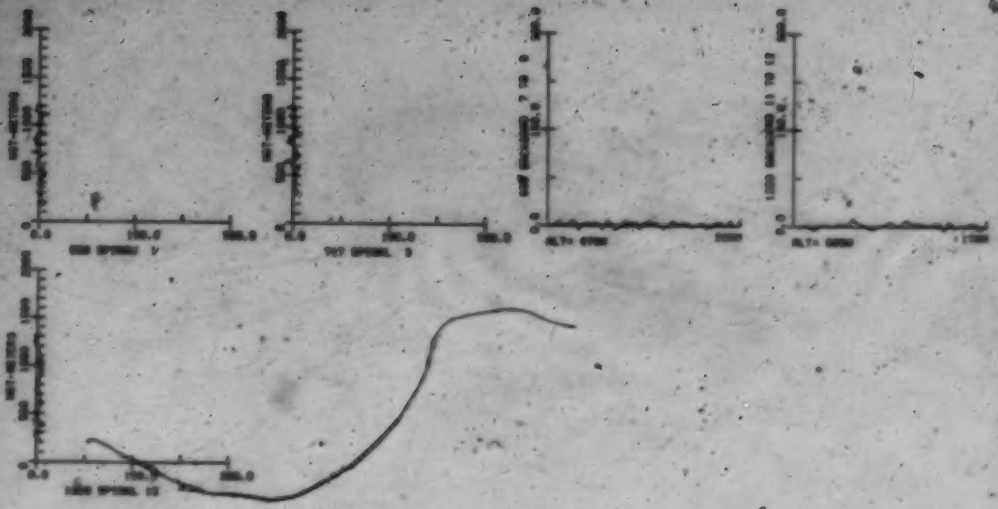
MAP 16



BSCAT IN $10^{-6}m^{-1}$

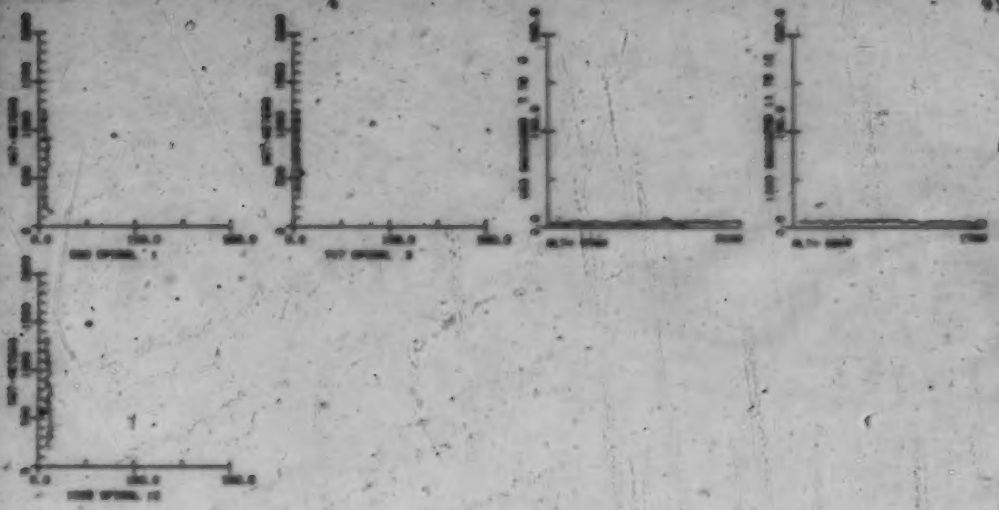
MAP 16

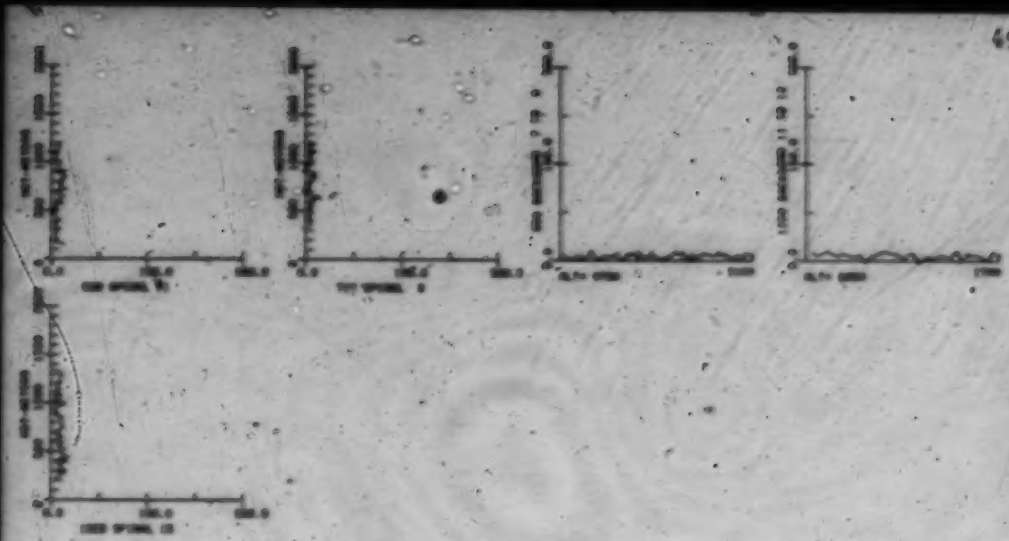


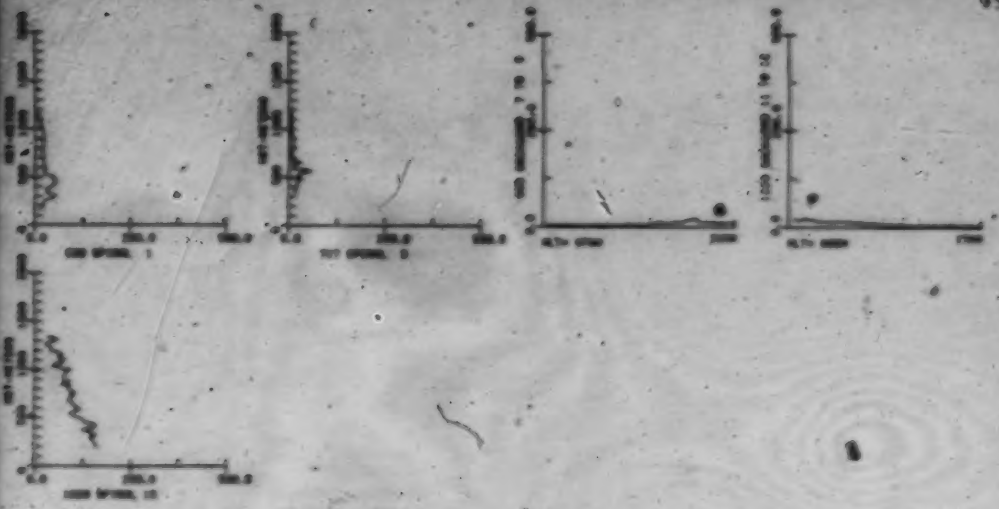


NB IN P.P.B.

MAP 16



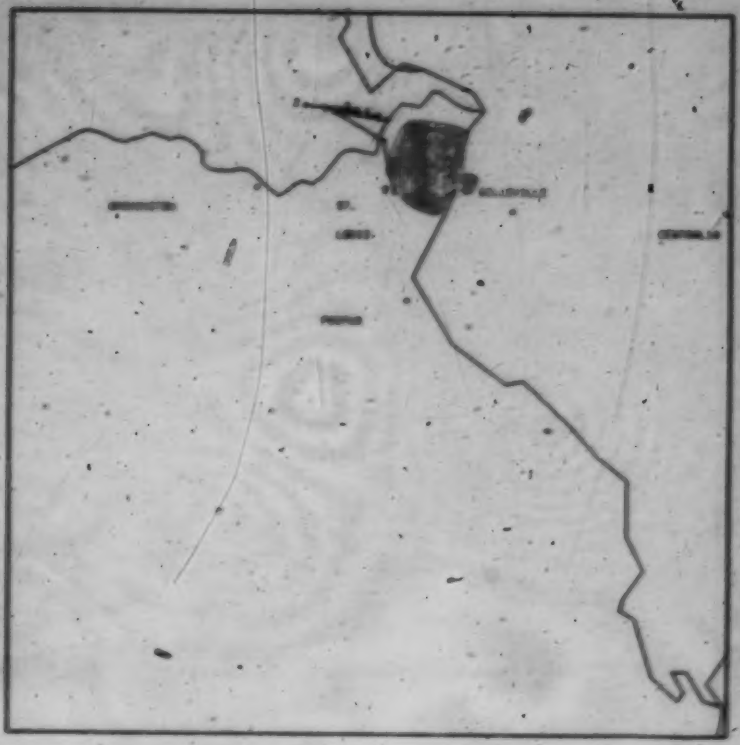


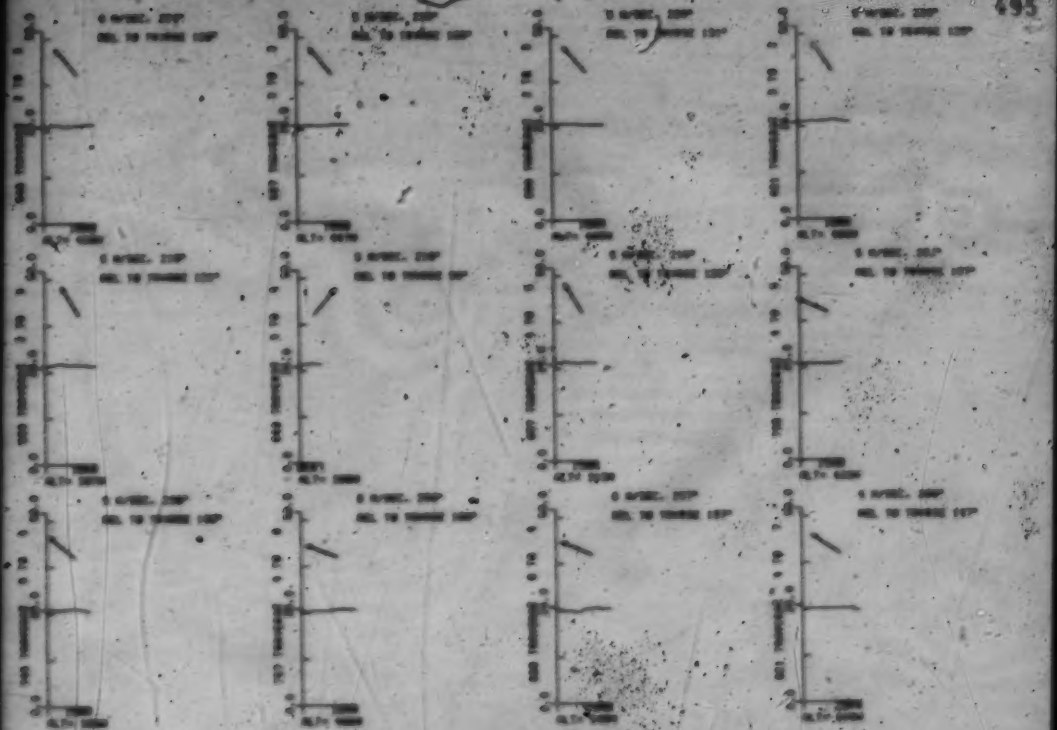


SO2 IN P.P.B.

83773076

MAP 20



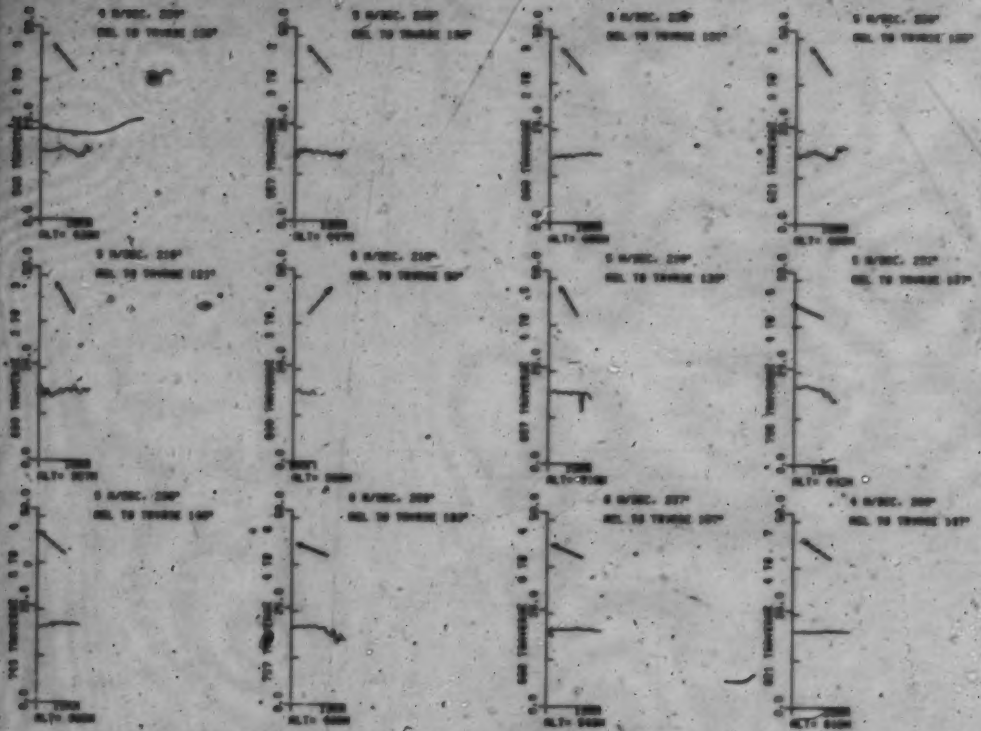


TEMP IN DEGREES C

MAP 20

TEMP IN DEGREES C

MAP 20

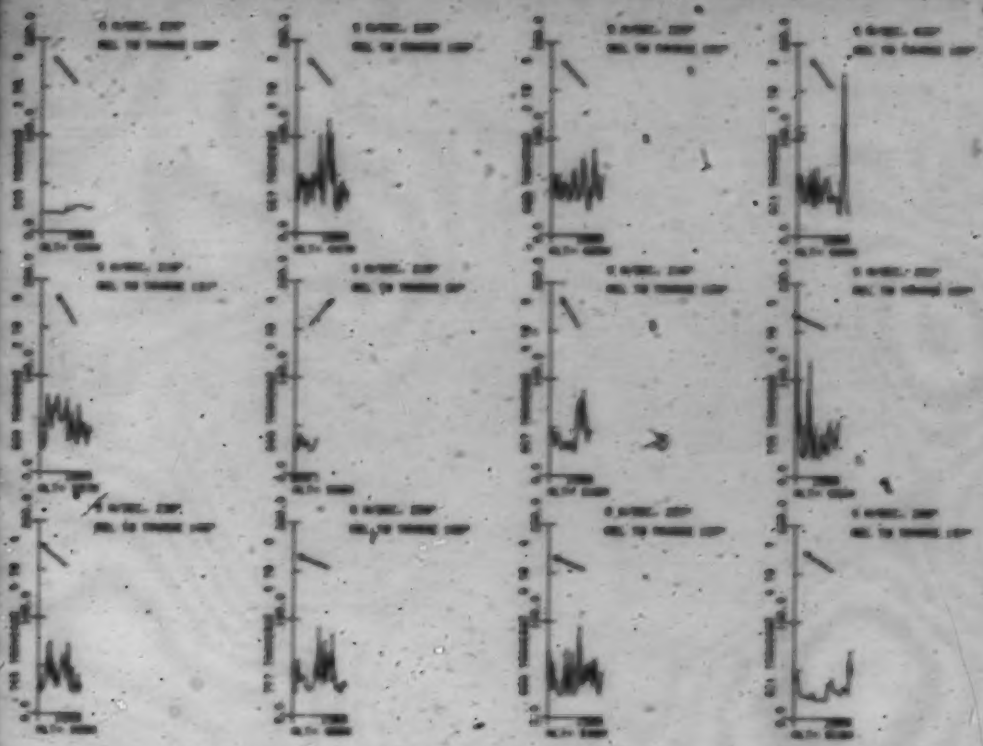


DEWPOINT IN DEGREES C

MAP 20

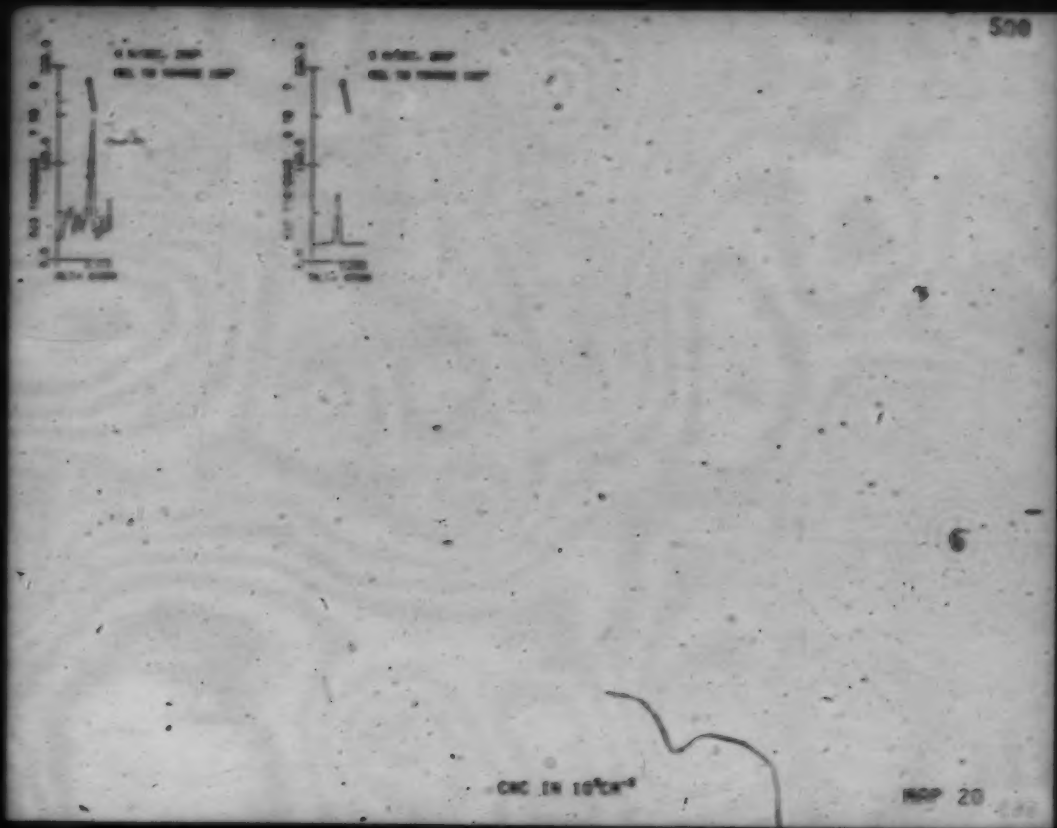
DEWPOINT IN DEGREES C

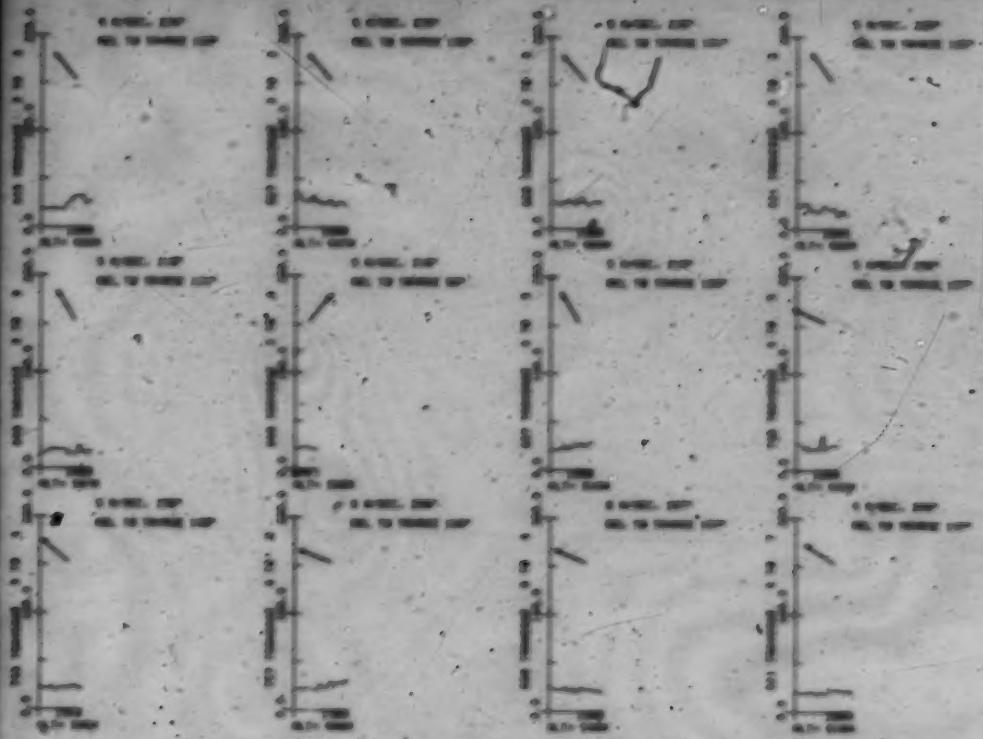
MAP 20



CNC IN $10^3 CM^{-3}$

MAP 20


500
CNC IN 10⁶CM⁻³
MAP 20



CHANGE IN MILLIVOLTS

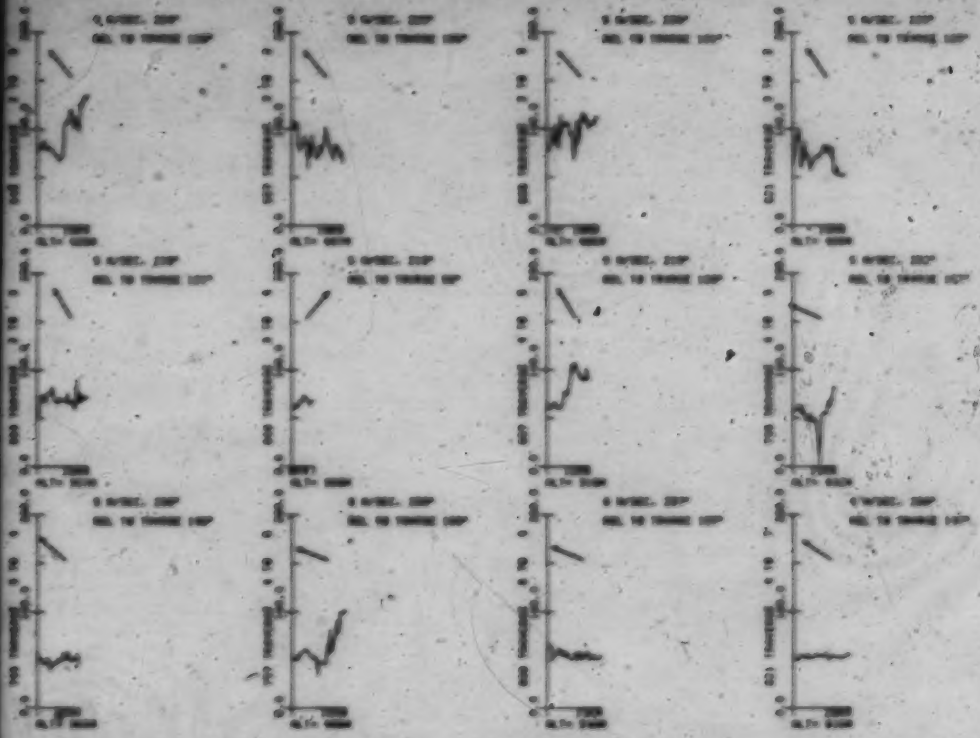
MAP 20

CHANGE IN MILLIVOLTS

MAP 20

BSCAT IN 10^{-6} M^{-1}

MAP 20

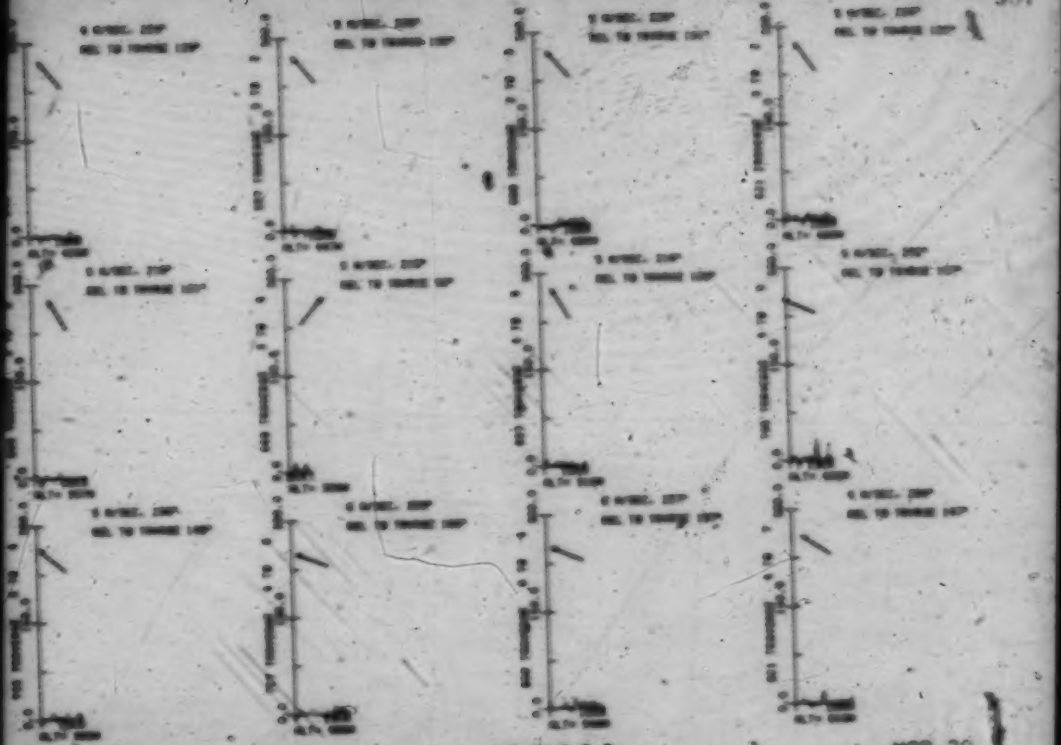


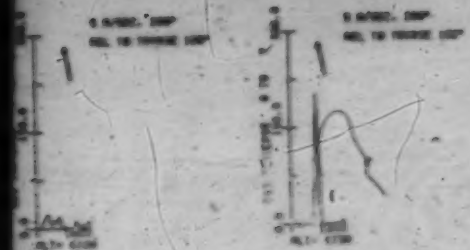
83 IN P.P.D.

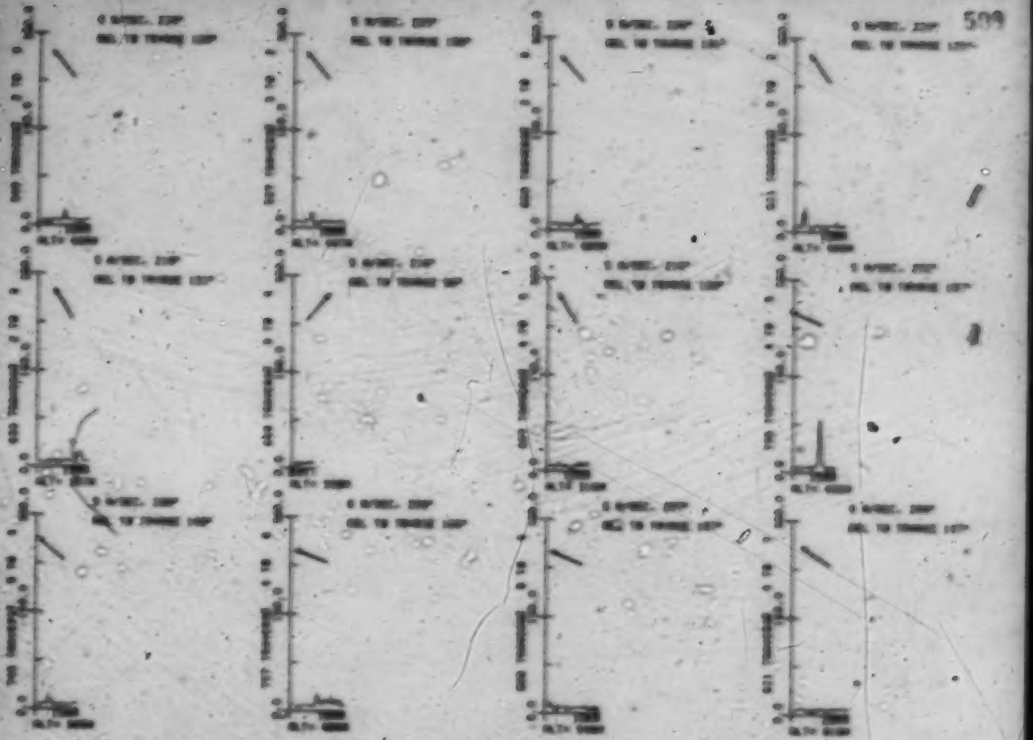
MAP 20

83 IN P.P.B.

MAP 20

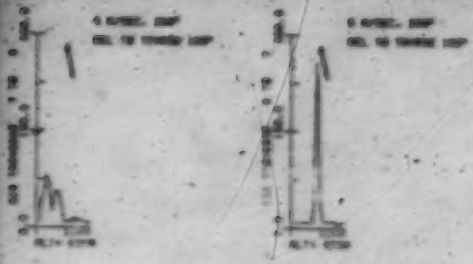


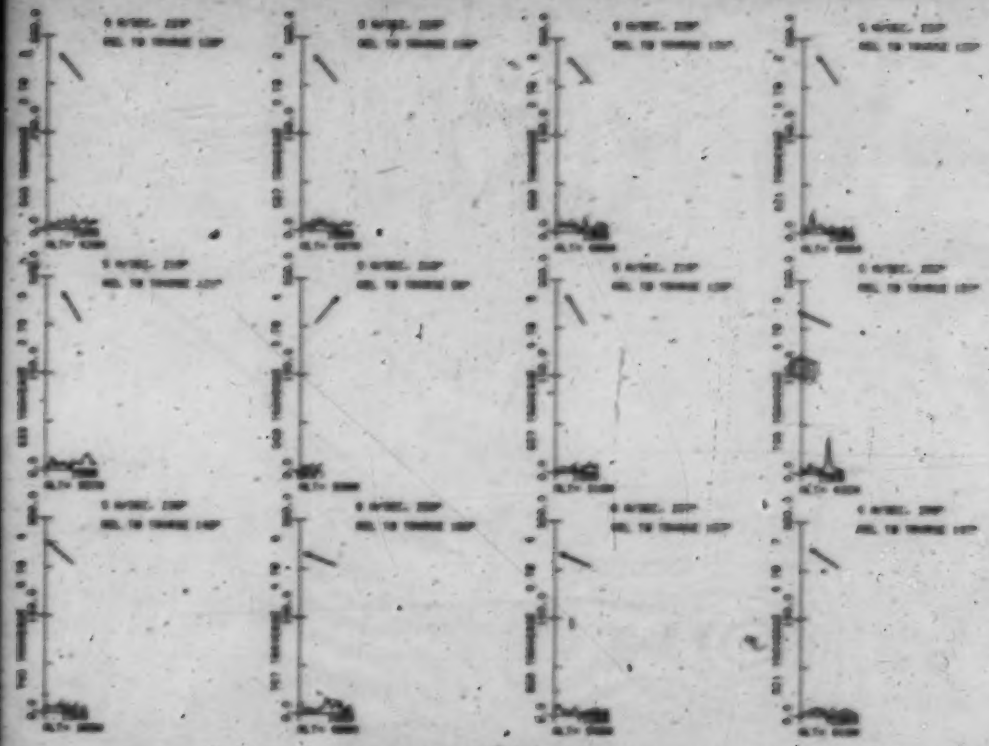




INDEX IN P.P.B.

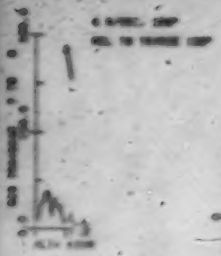
MAP 20

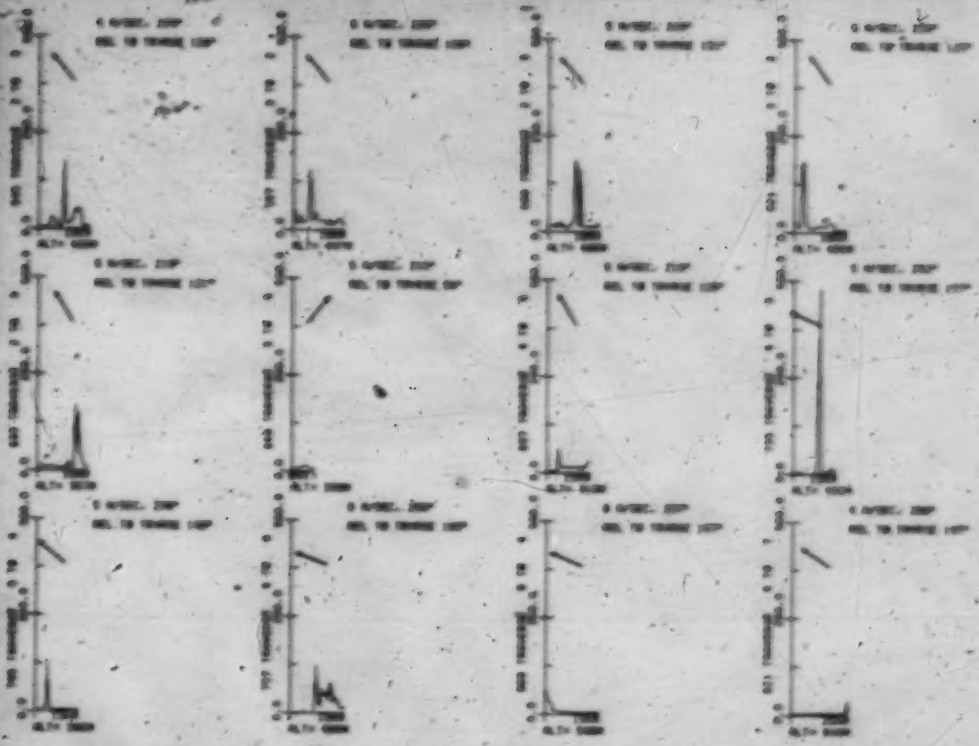




NO2 IN P.P.B.

MAP 20



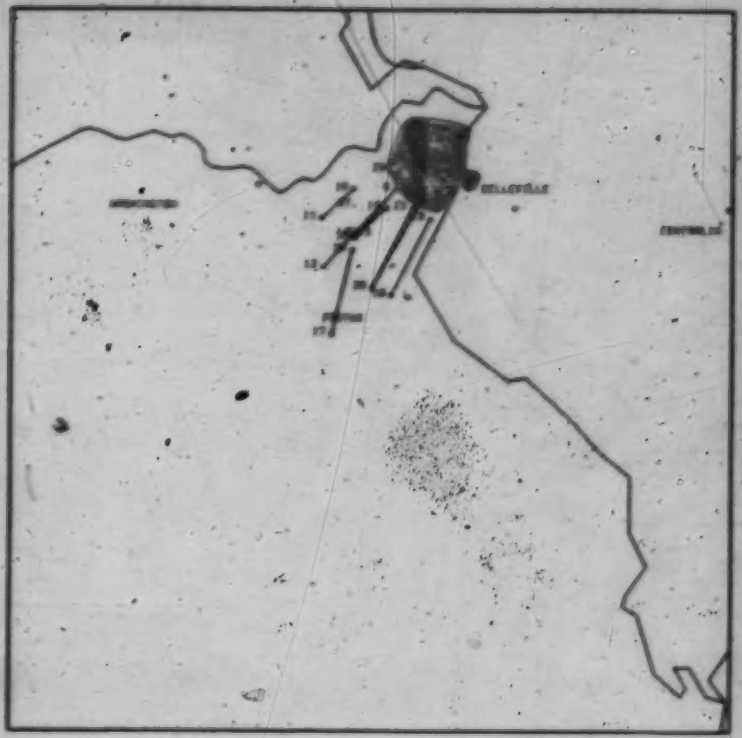


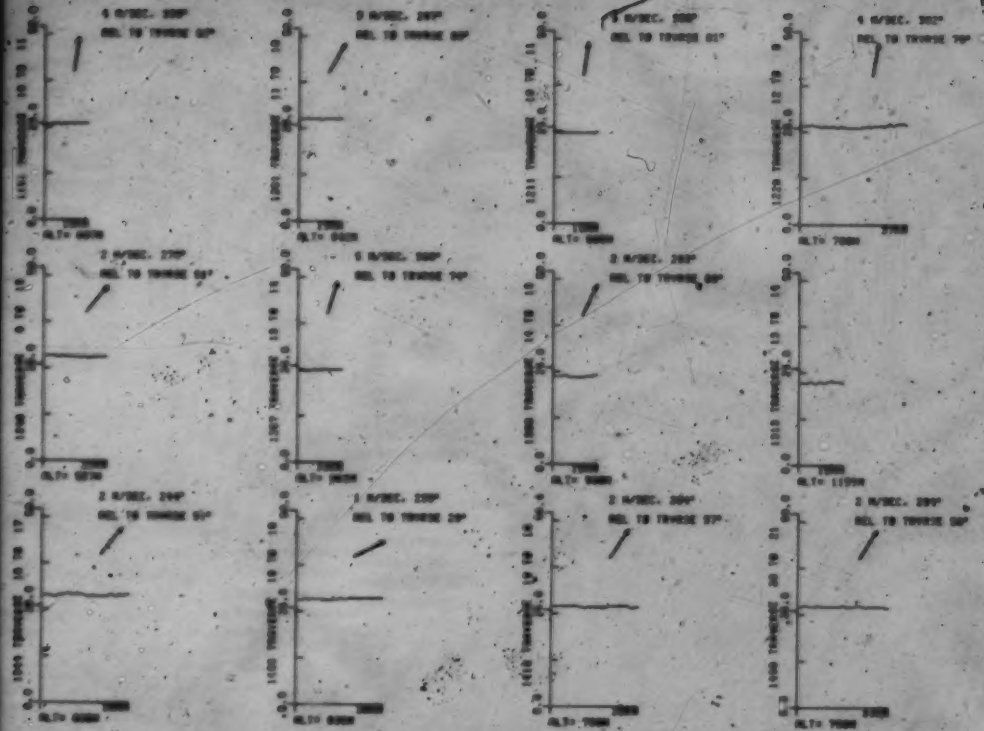
582 in P.P.B.

MAP 20

63873076

MAP 21



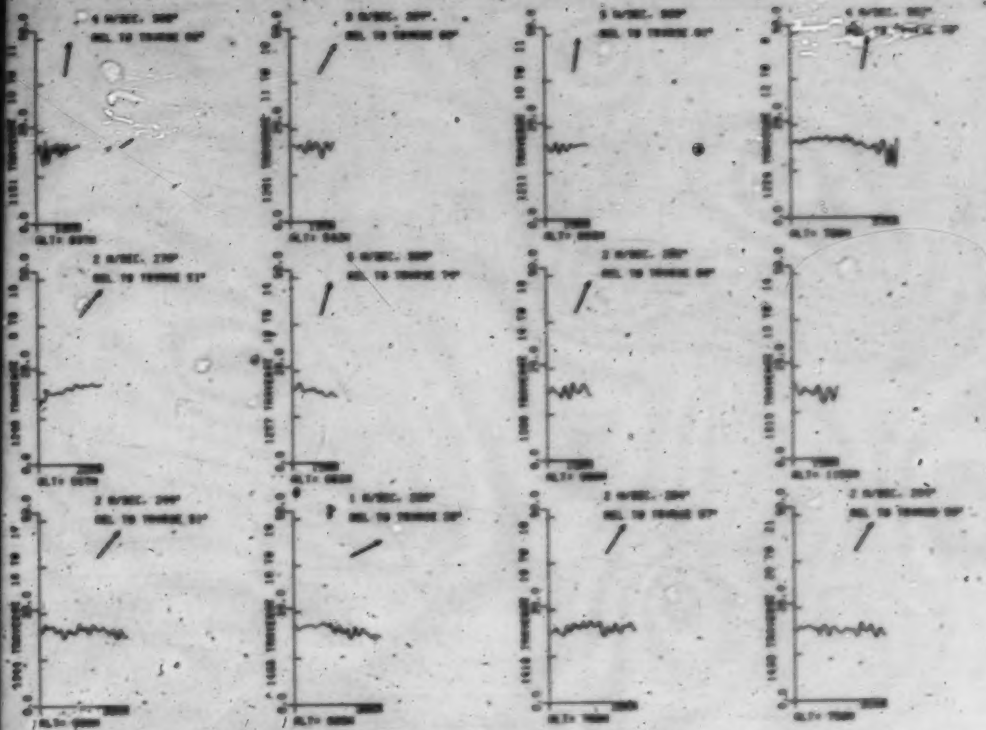


TEMP IN DEGREES C

MAP 21

TEMP IN DEGREES C

MAP 21

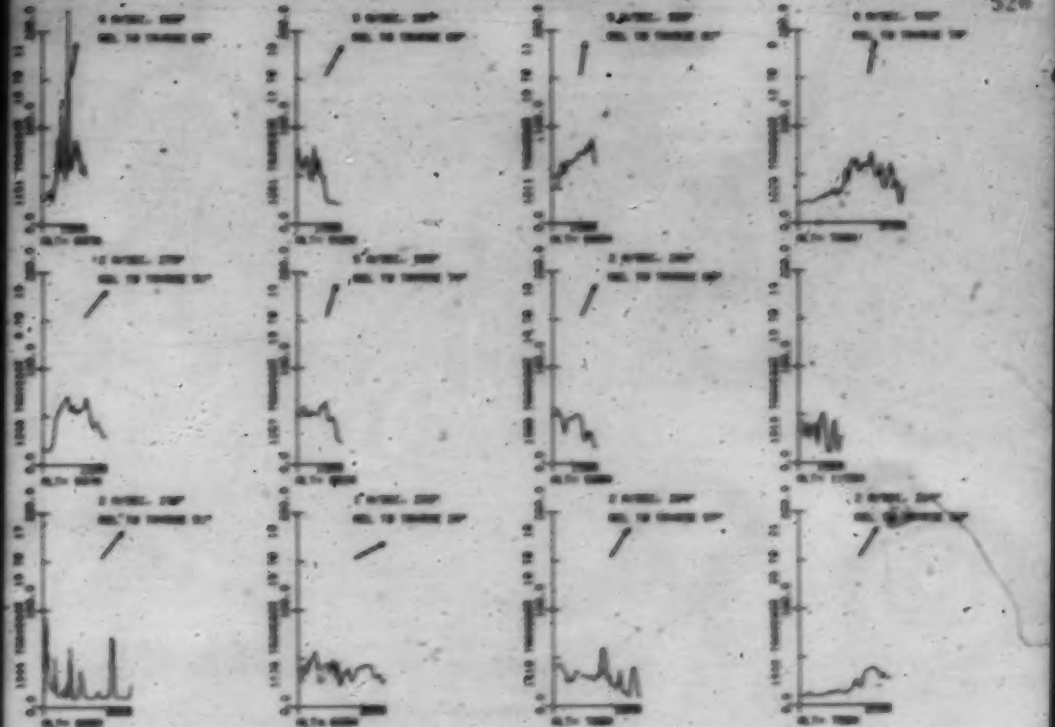


DEWPOINT IN DEGREES C

MAP 21

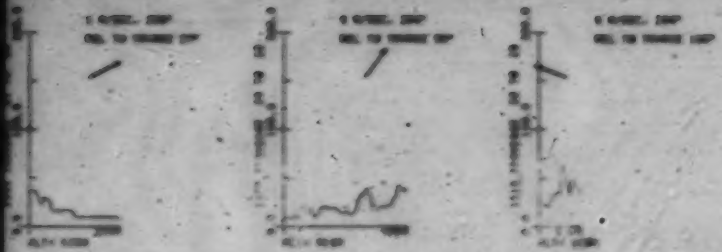
DEWPOINT IN DEGREES C

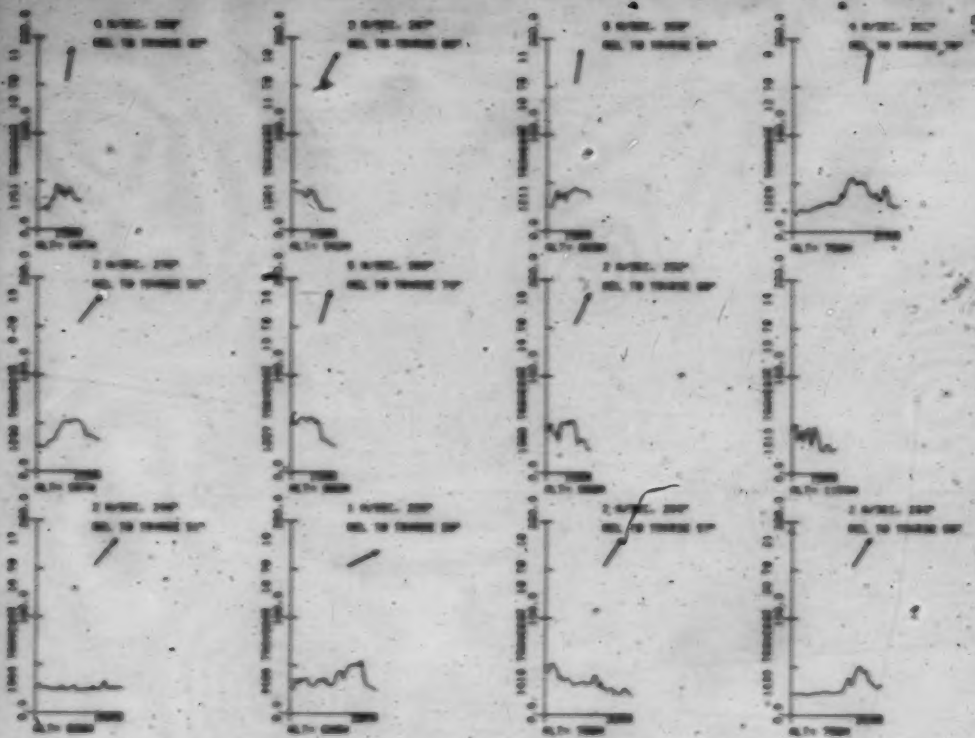
MAP 21



CNC IN $10^{3}CM^{-3}$

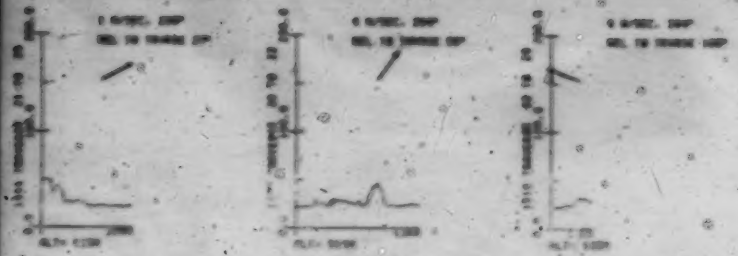
MAP 21





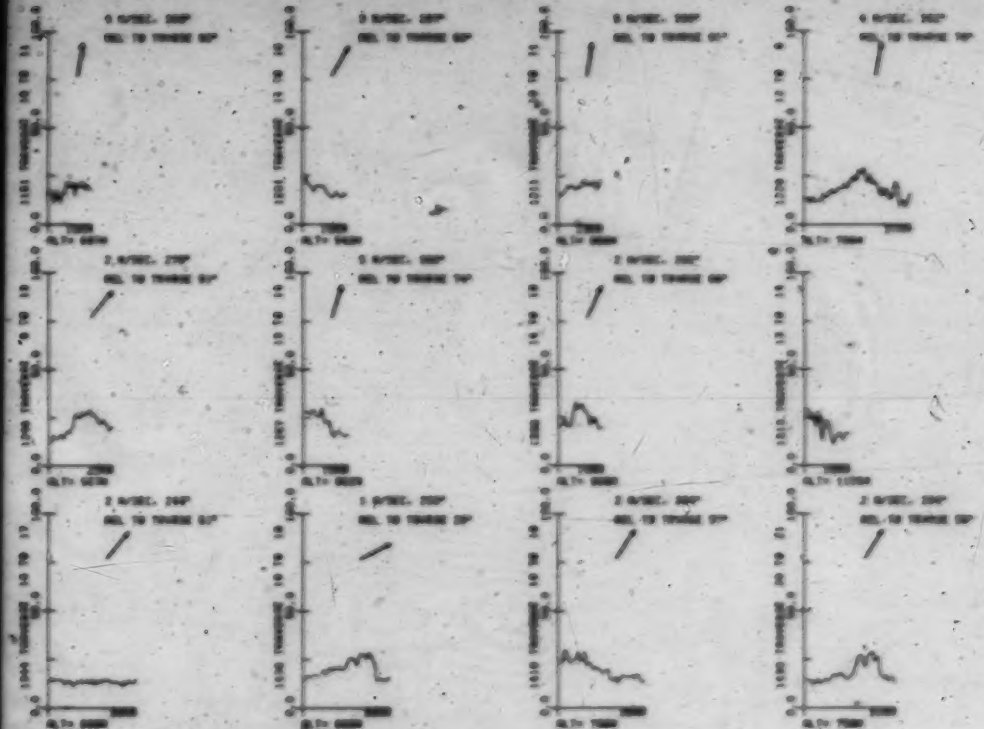
CHANGE IN MILLIVOLTS

MAP 2



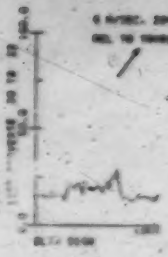
CHARGE IN MILLIVOLTS

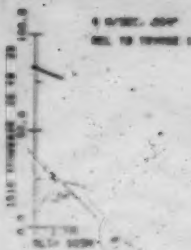
MAP 21



BSCAT IN $10^{-5}m^{-1}$

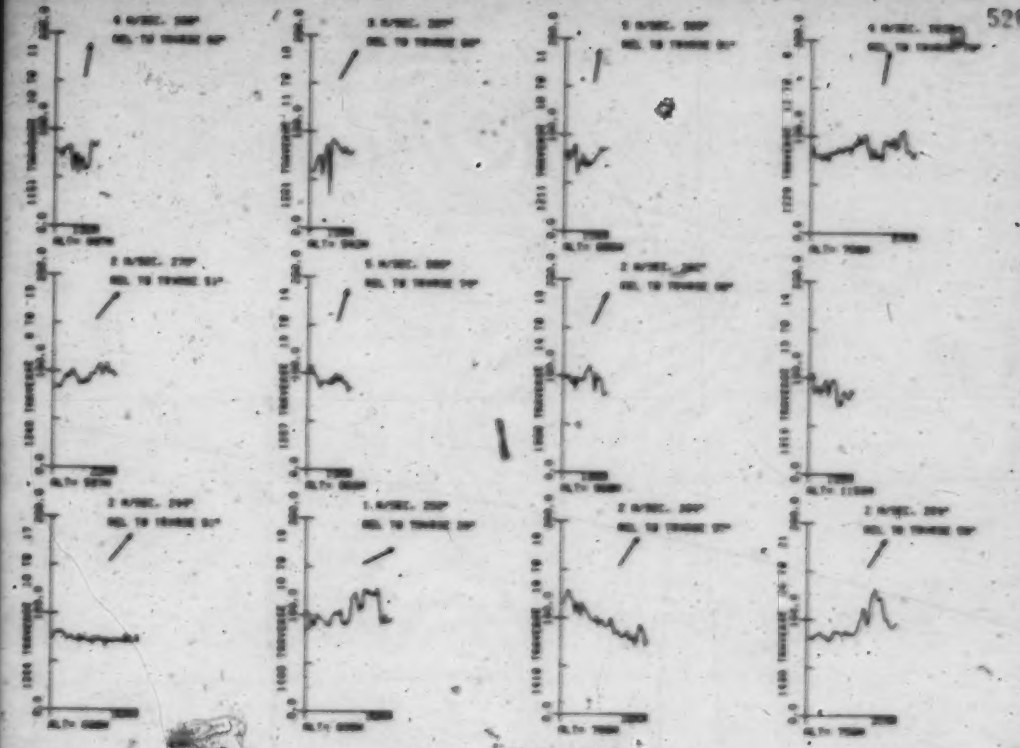
HRP 21





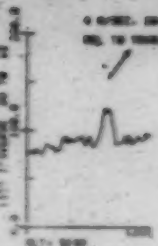
BSCAT IN $10^{-6}m^{-1}$

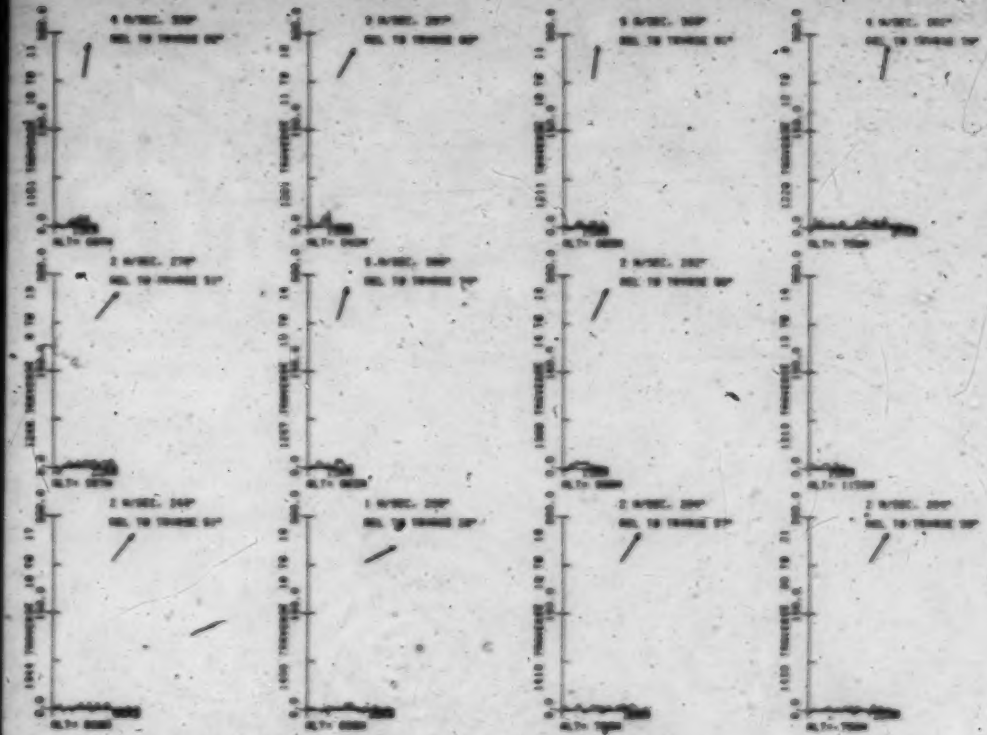
MAP 21



83 IN P.P.B.

MAR 21





NB IN P.P.B.

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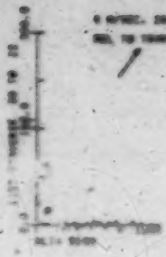

NO IN P.P.E.

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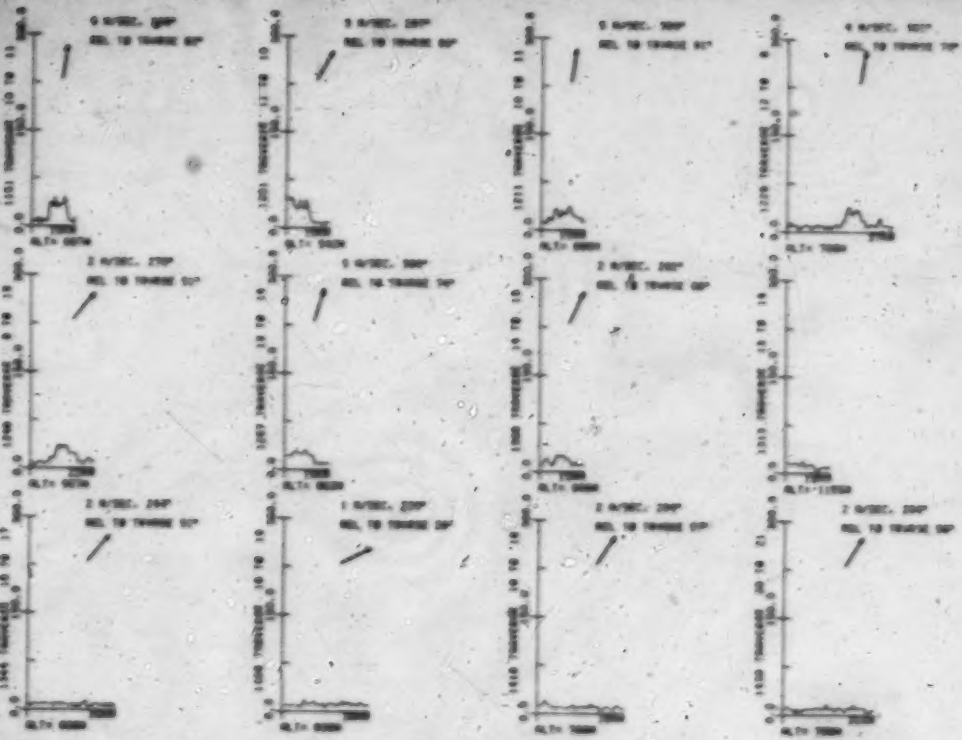
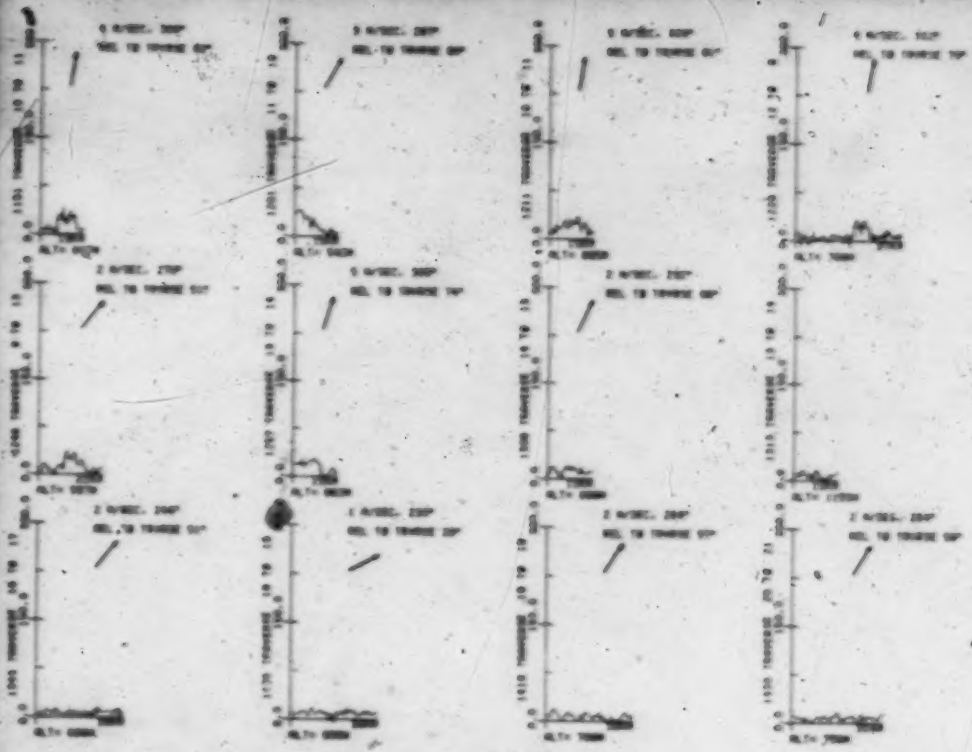


MAP 21

NOT IN P.P.B.

MAP 21

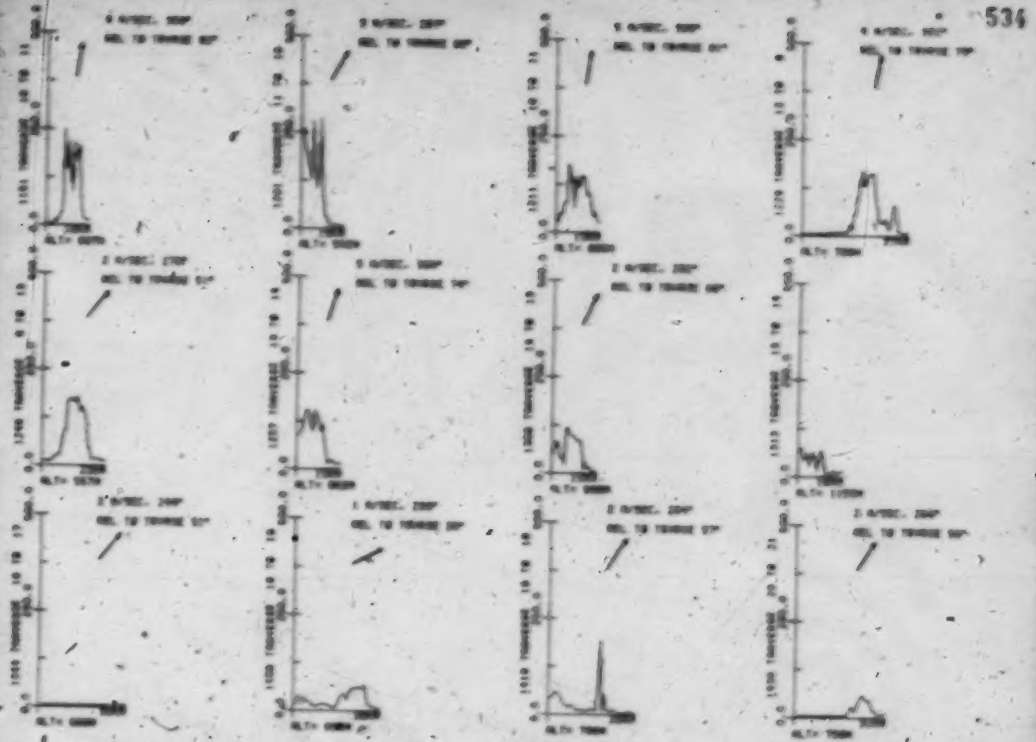


NO2 IN P.P.B.

MAP 21

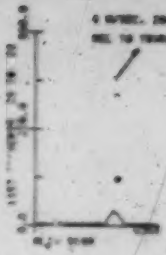
NO2 IN P.P.B.

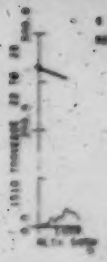
MAP 21



582 (N P.P.B.

MAP 21





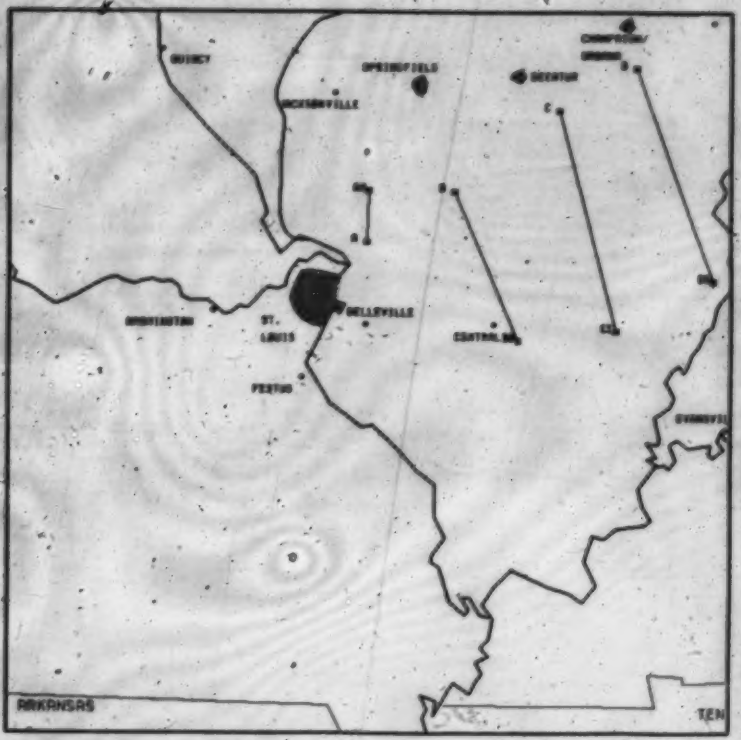
502 EV P.P.B.

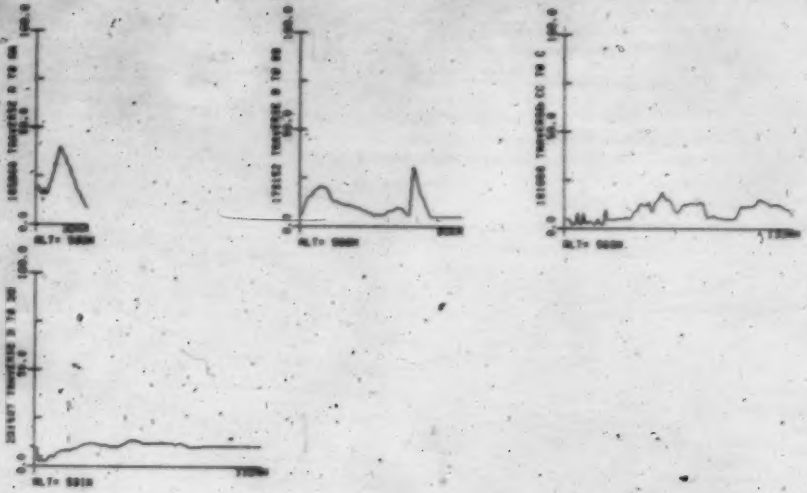
MAP 21

PART 2:
UNIVERSITY OF WASHINGTON DATA

W7600I.VOL 6-27-76

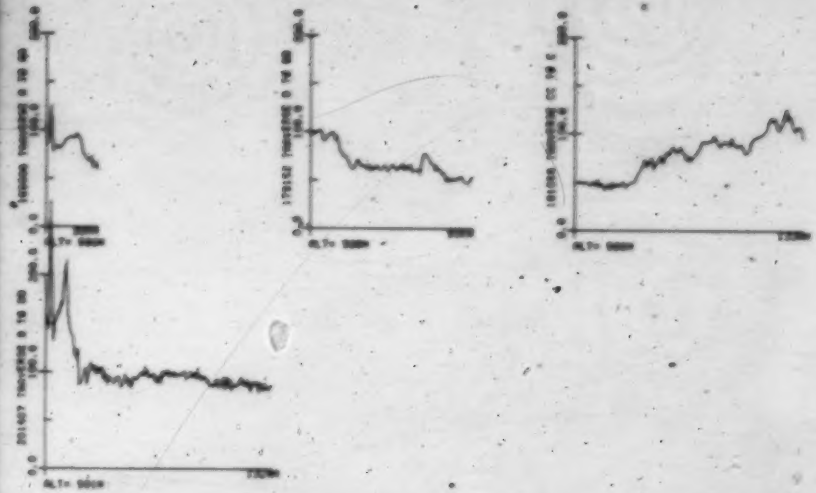
MAP 1





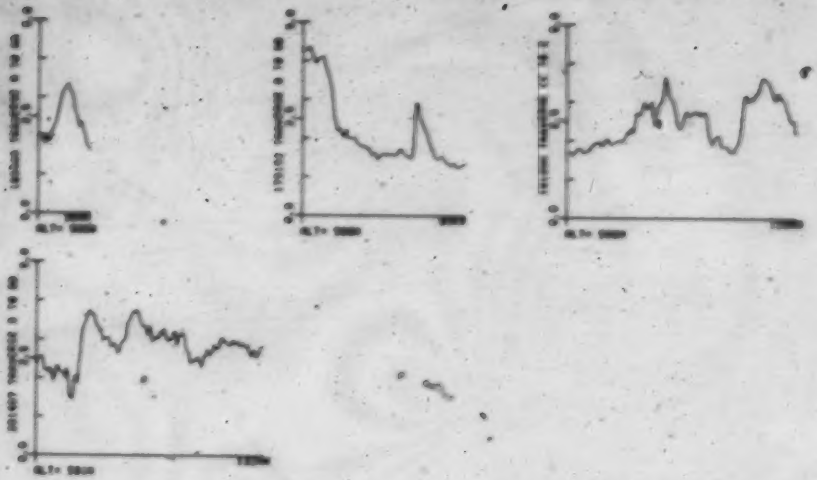
SOZ IN P.P.B.

MAP 1



O3 IN P.P.B.

MAP 1

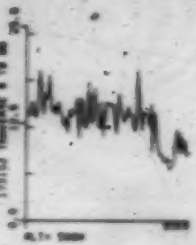


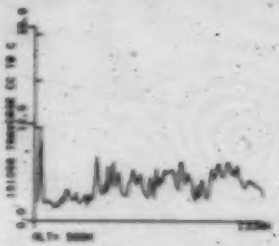
BSCAT IN $10^{-4}M^{-1}$

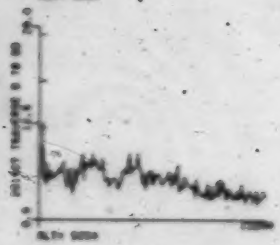
MAP 1

SR1 IN UC/M³

MAP 1



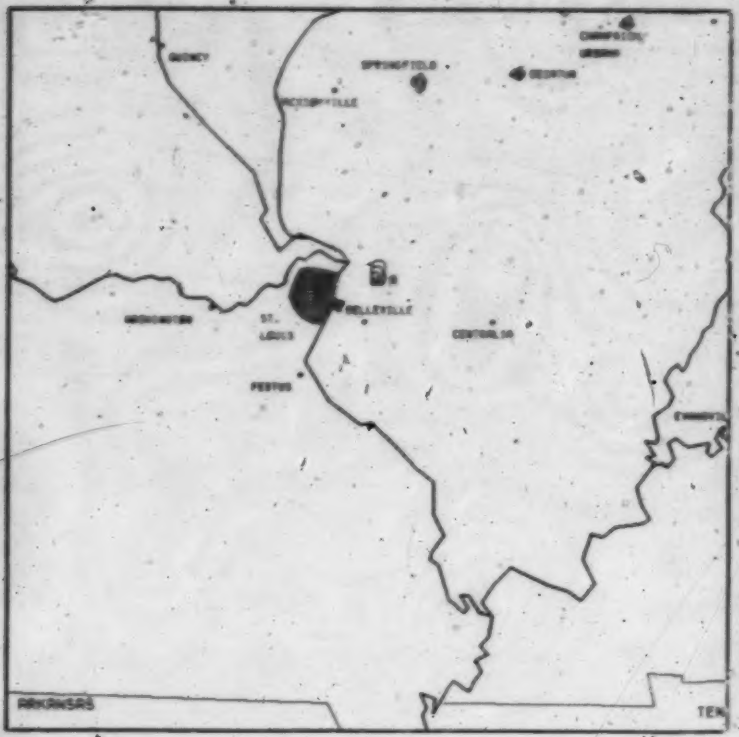


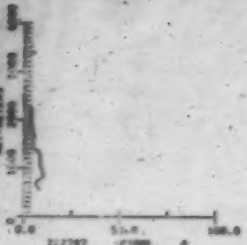


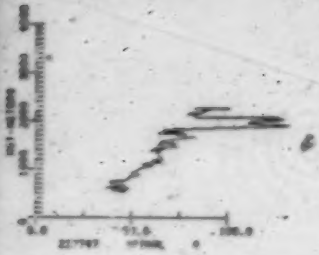
CNC IN $10^5 cm^{-3}$

MAP I

W76001.VOL 6-27-76 MAP 1

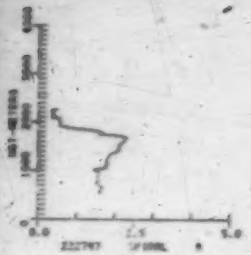




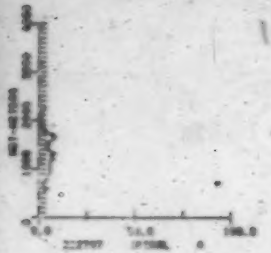


83 IN P.P.D.

MOP

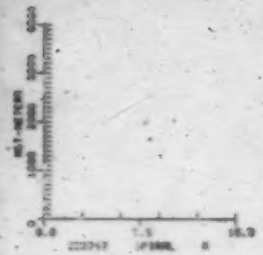


ESCAT IN 10^{-4} M^{-1}



CNC IN $10^3 CM^{-1}$

MAP

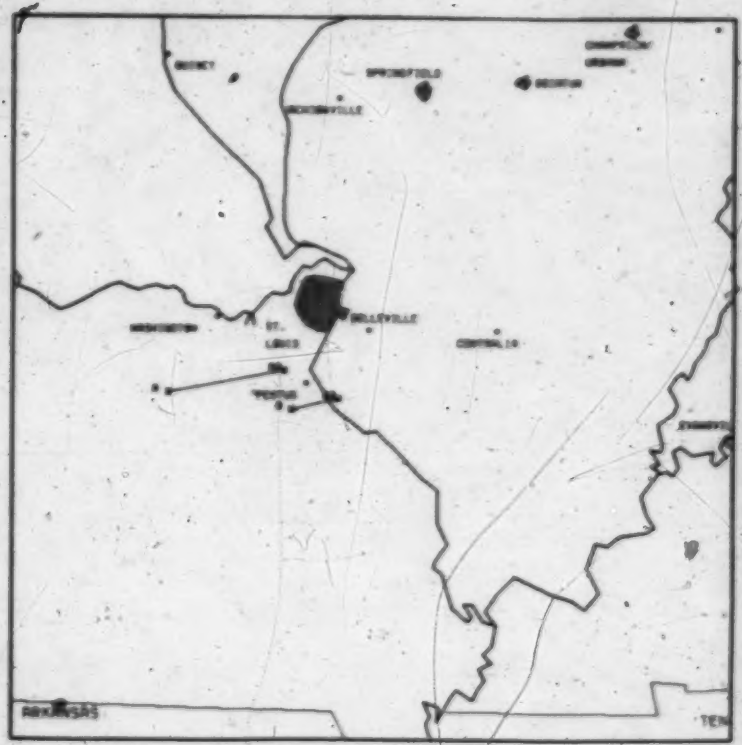


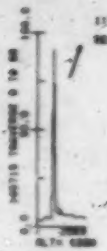
SR4 IN UC/M³

MAP

W76004.VOL 7-05-76

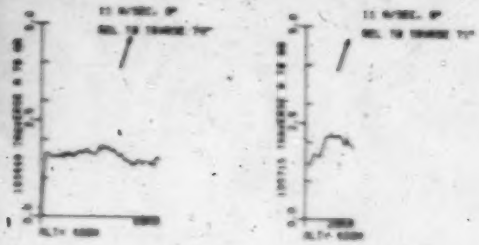
MAP 2





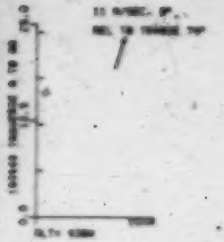
382 IN P.P.B.

MAP 2



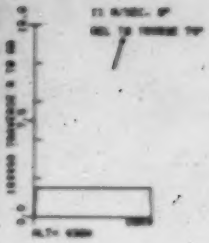
BSCAT IN $10^{-6}m^{-1}$

MAP 2



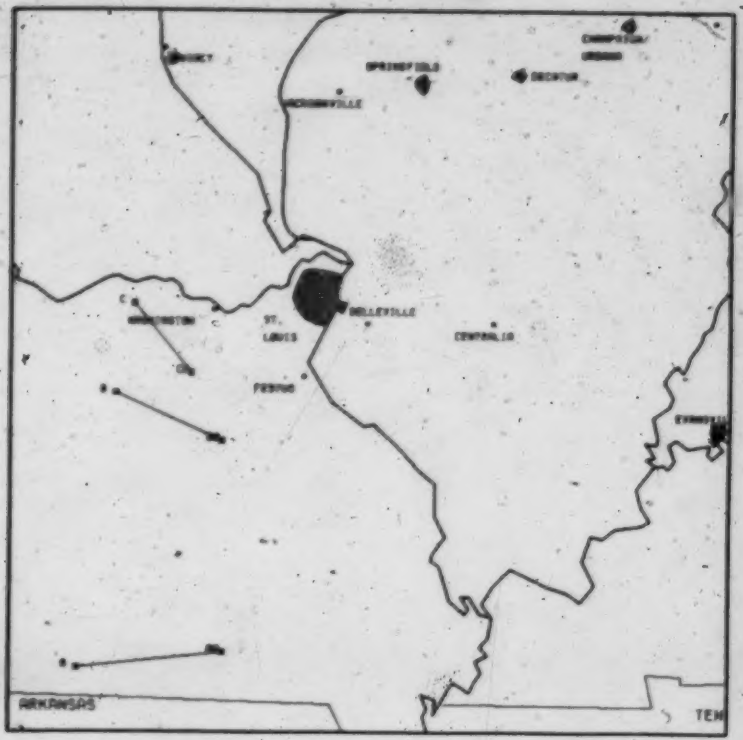
CNC IN $10^3 cm^{-3}$

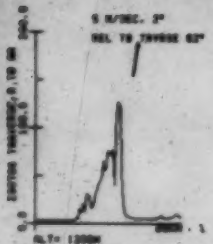
MAP 2

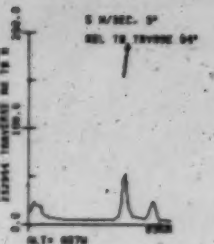


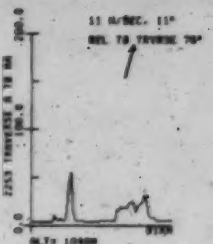
M76005.VOL 7-5-76

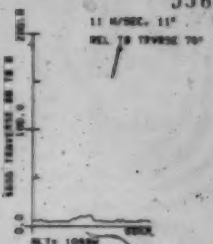
MAP 3

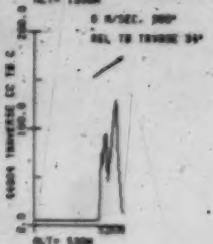






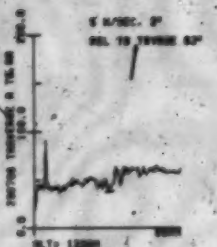


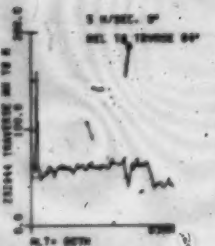


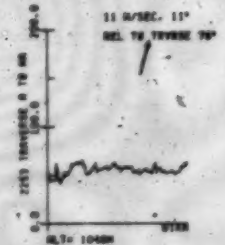


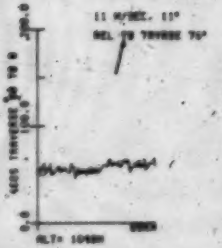
SO2 IN P.P.B.

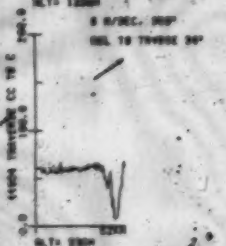
MAP 3





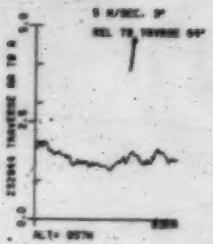


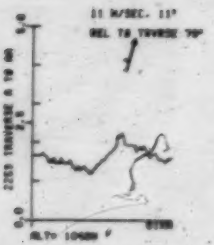


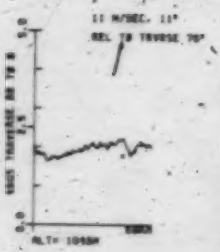


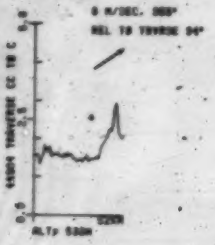
83 IN P.P.B.

MAP 3



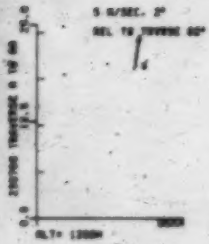


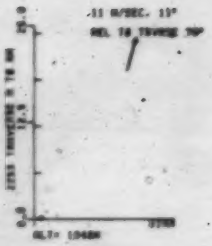


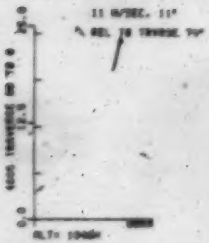


BSCAT IN $10^{-4}M^{-1}$

MAP 3

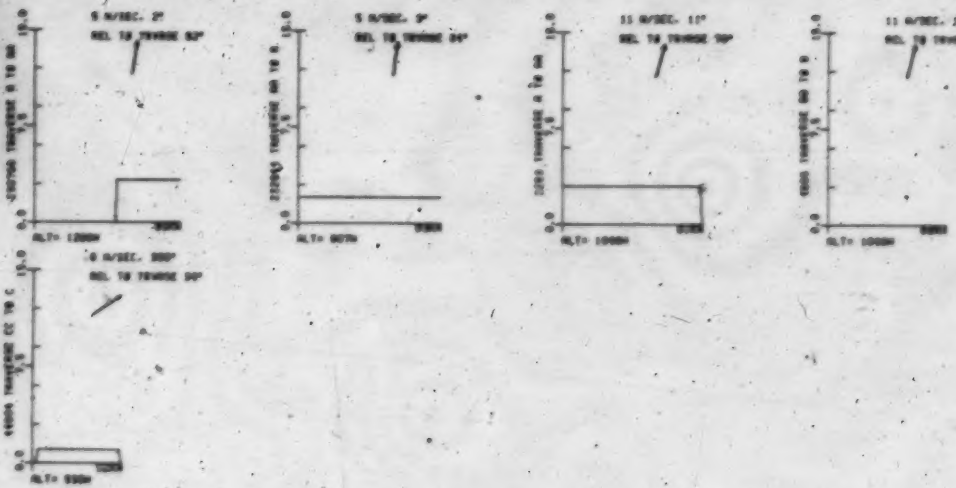






CNC IN $10^3 CM^{-3}$

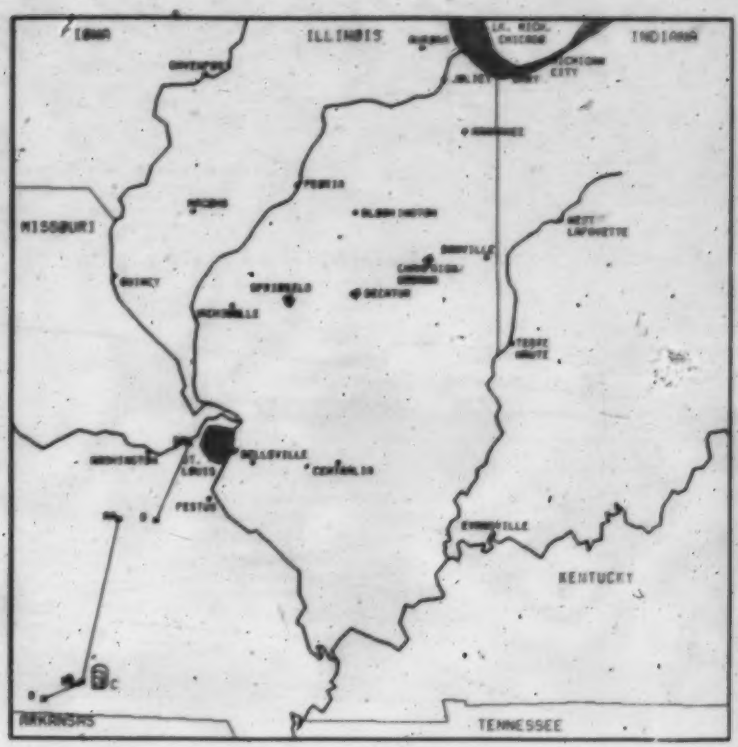
MAP 3

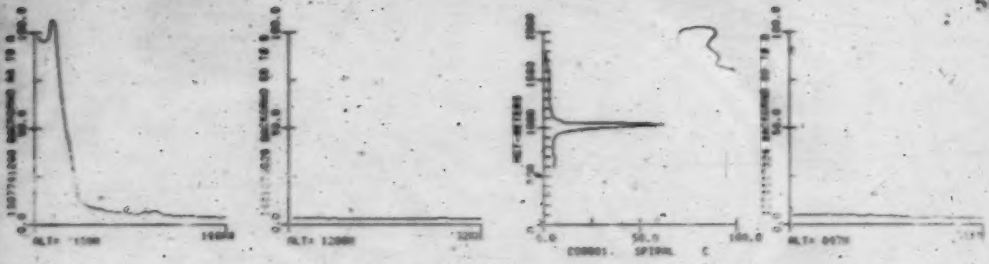


SR4 IN UC/M³

MAP 3

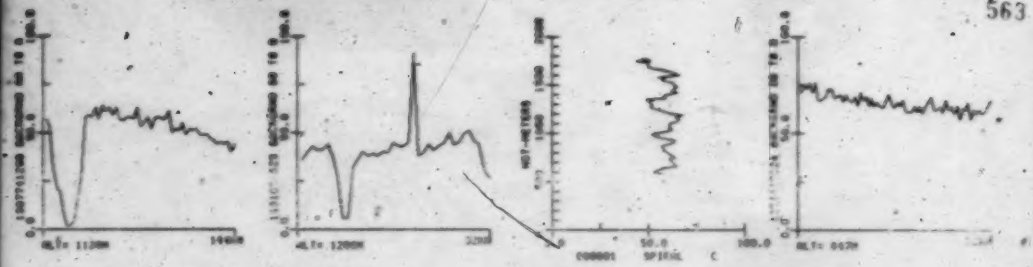
W76005.VOL 7-5-76 MAP 2





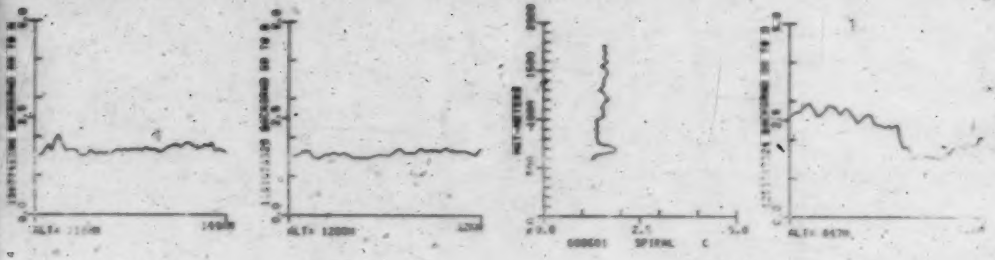
SO2 IN P.P.B.

MAP 2



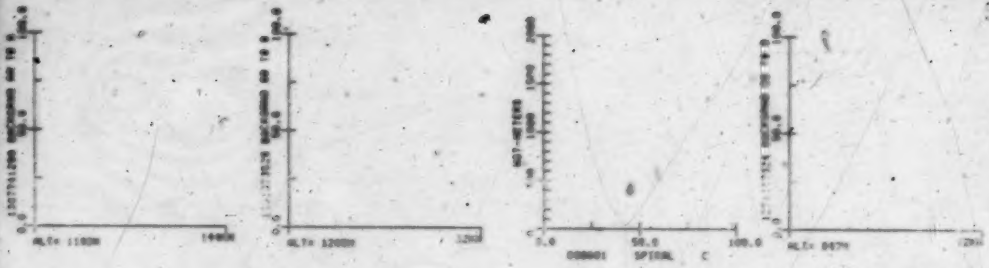
03 IN P.P.B.

MAP 2



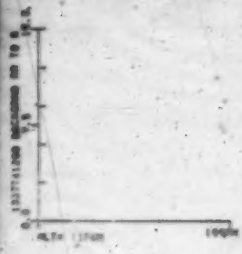
BSCAT IN 10^{-} [illegible]

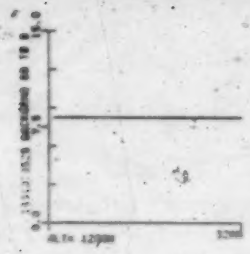
MAP 2

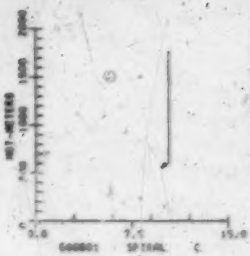


CNC IN $10^3 CM^{-3}$

MAP 2



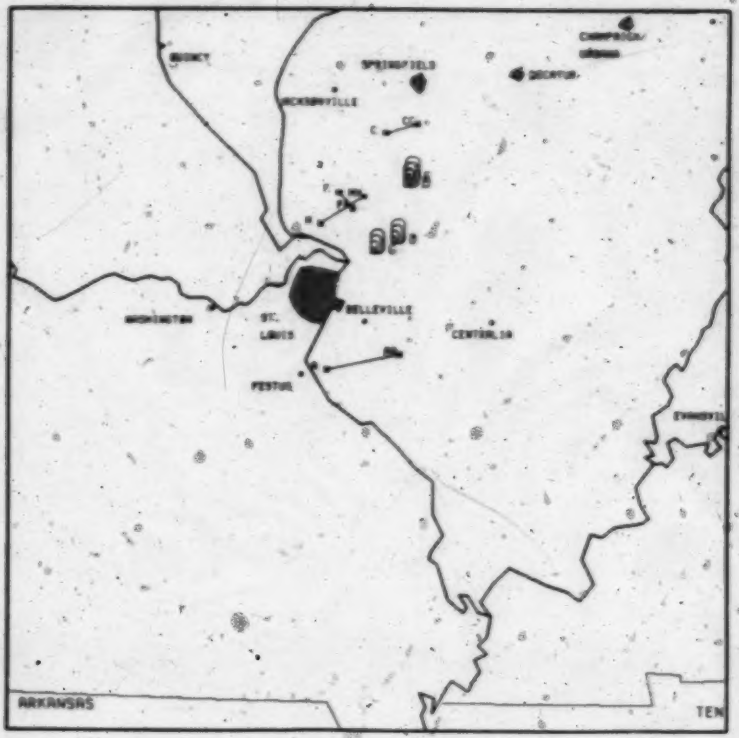


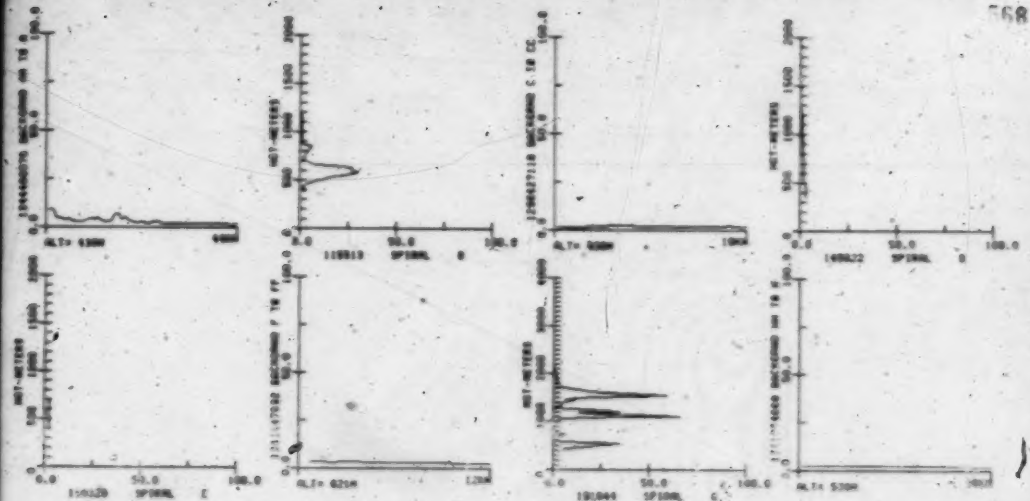


S84 IN UC/M³

MAR

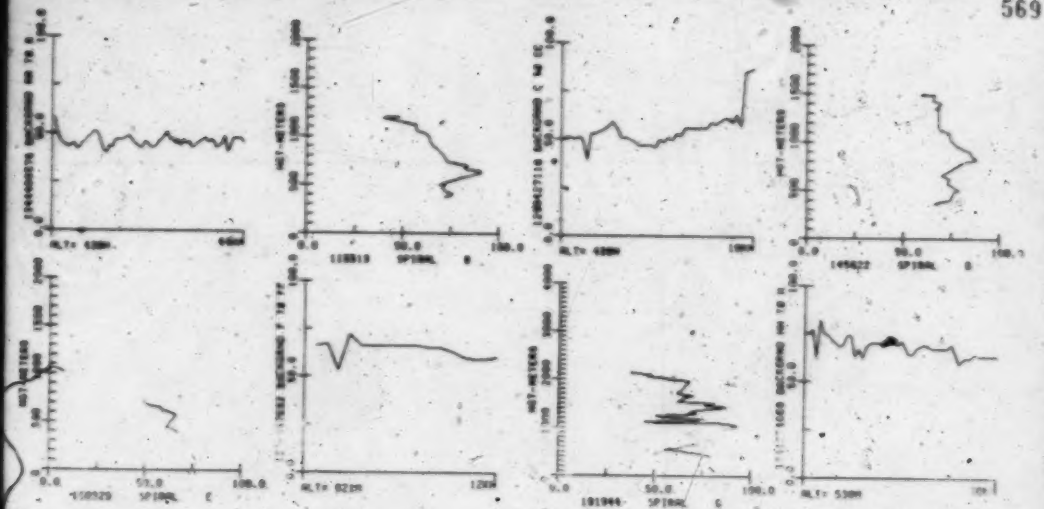
M76008, VOL 7-7-76 MAP 3





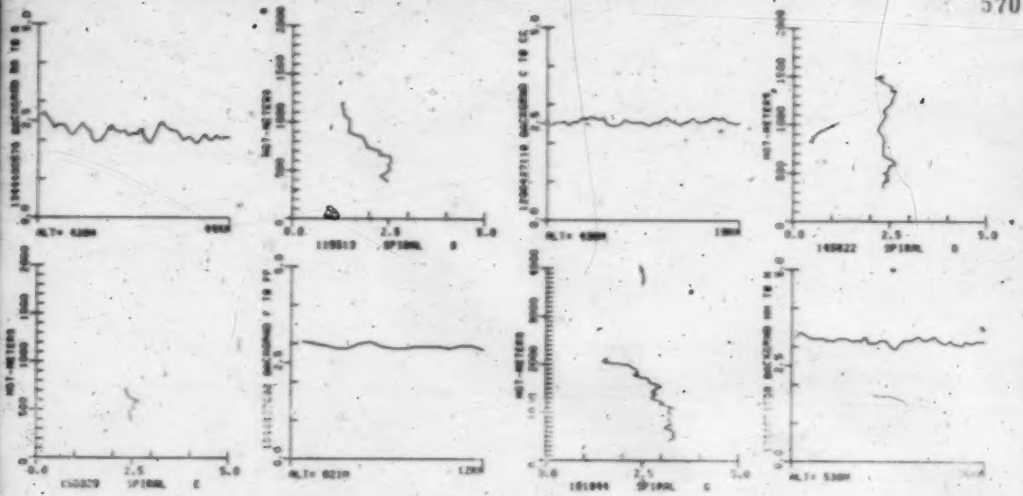
SO2 IN P.P.B.

MAP 3



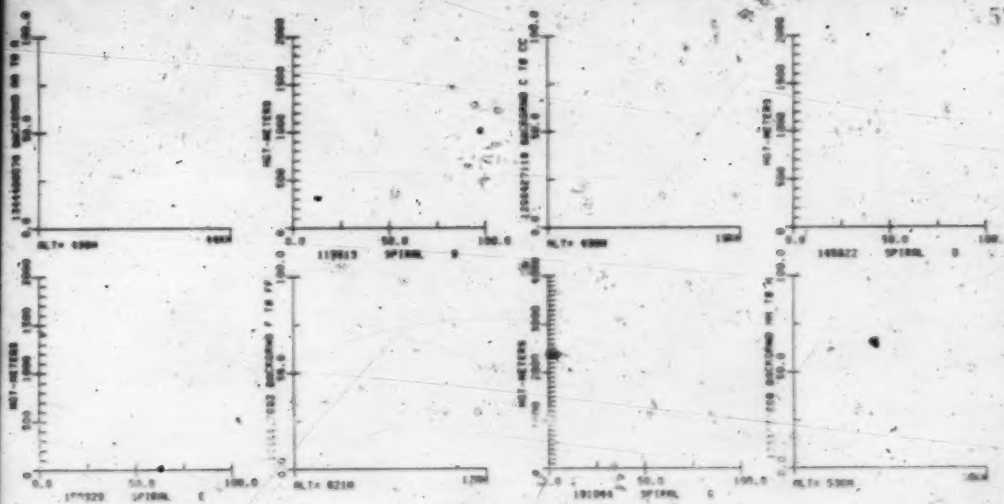
03 IN P.P.B.

MAP 3



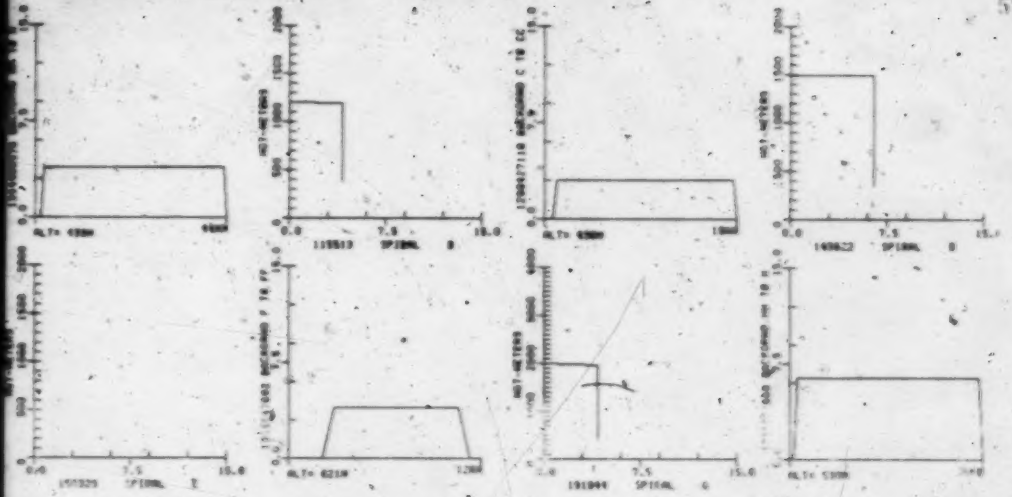
BSCAT IN $10^{-6}m^{-1}$

MAP 3



CNC IN $10^3 CM^{-3}$

MAP



904 IN UC/M³

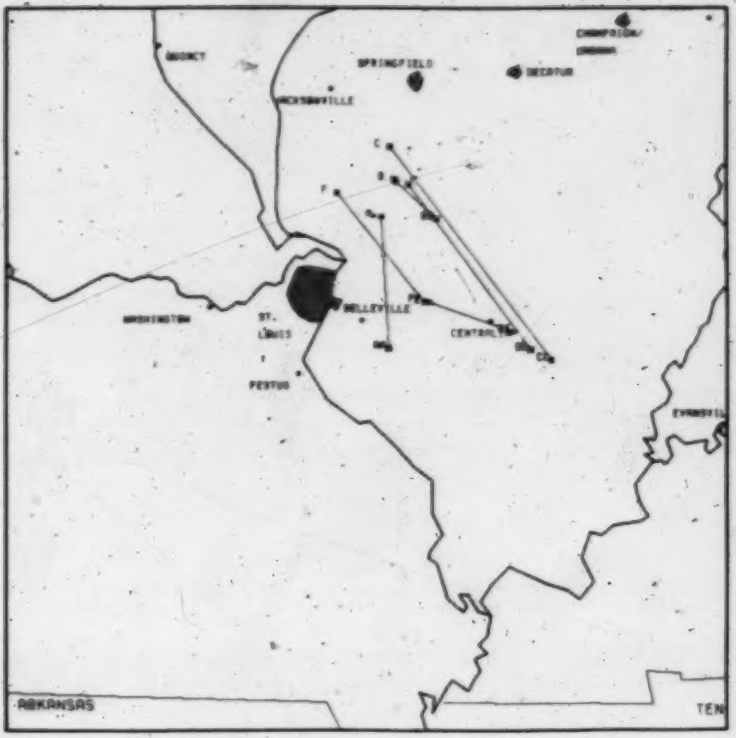
MAP 5

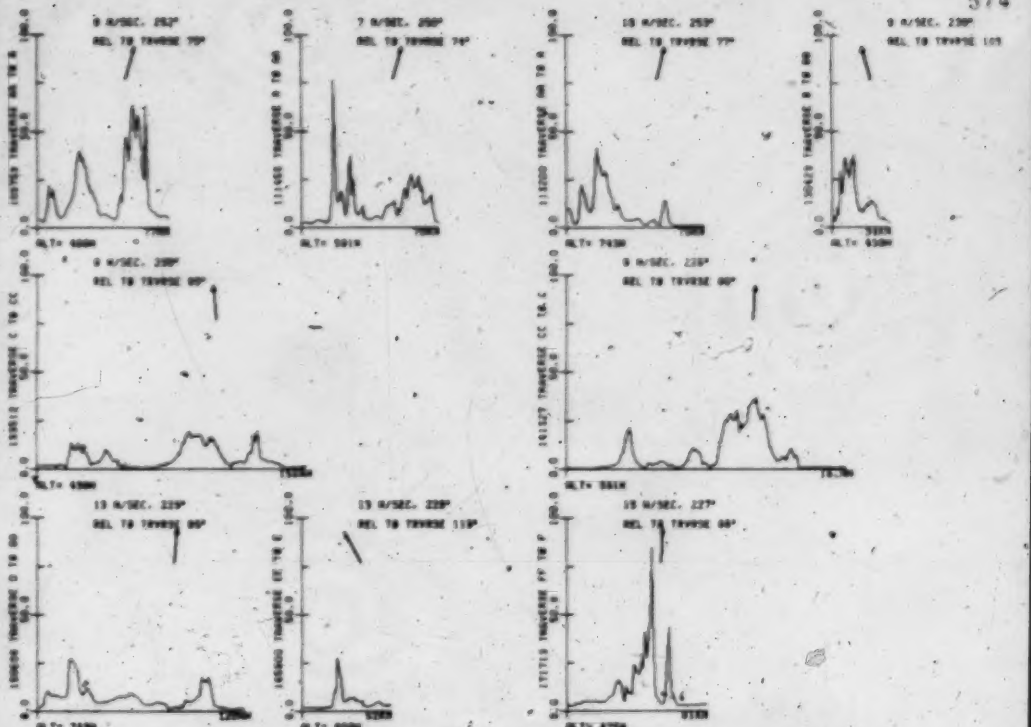
E 17

573

W76008.V0L 7-7-76

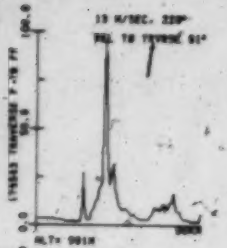
MAP 4

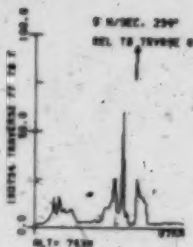


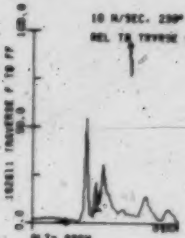


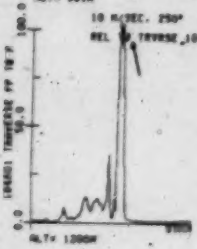
SO2 IN.P.P.B.

MAP 4



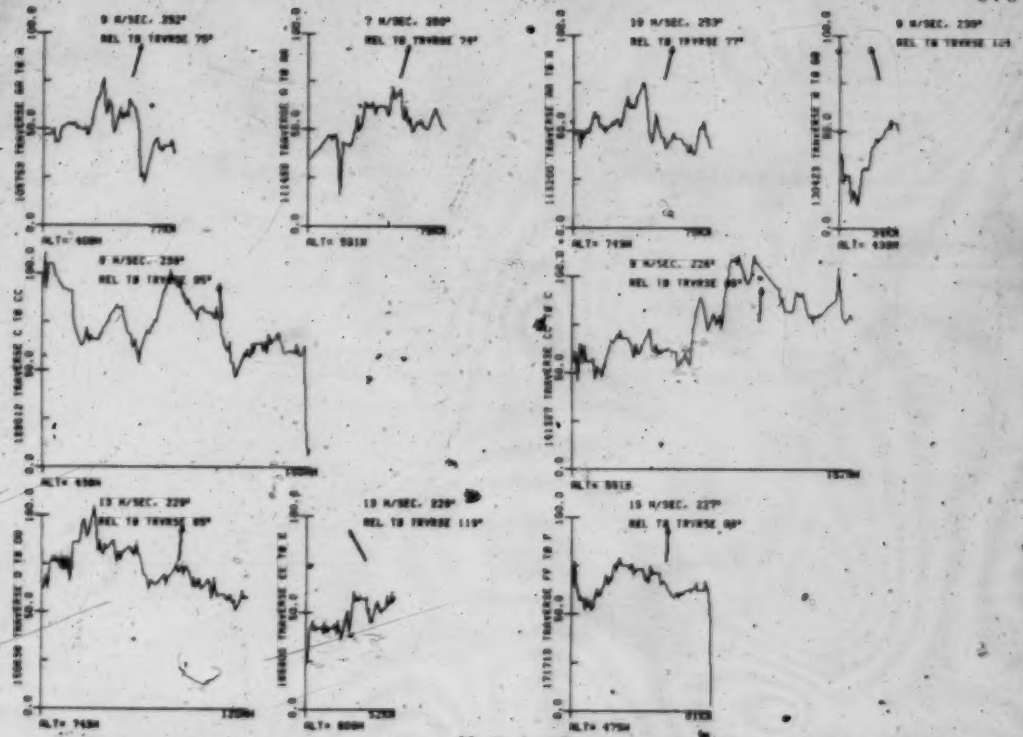






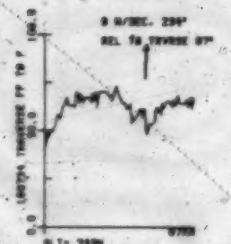
SO2 IN P.P.B.

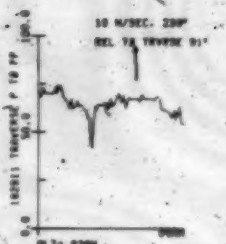
MAP 4

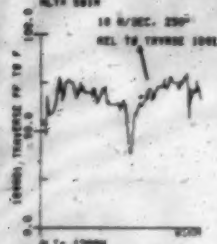


83 IN P.P.B.

MAP 4

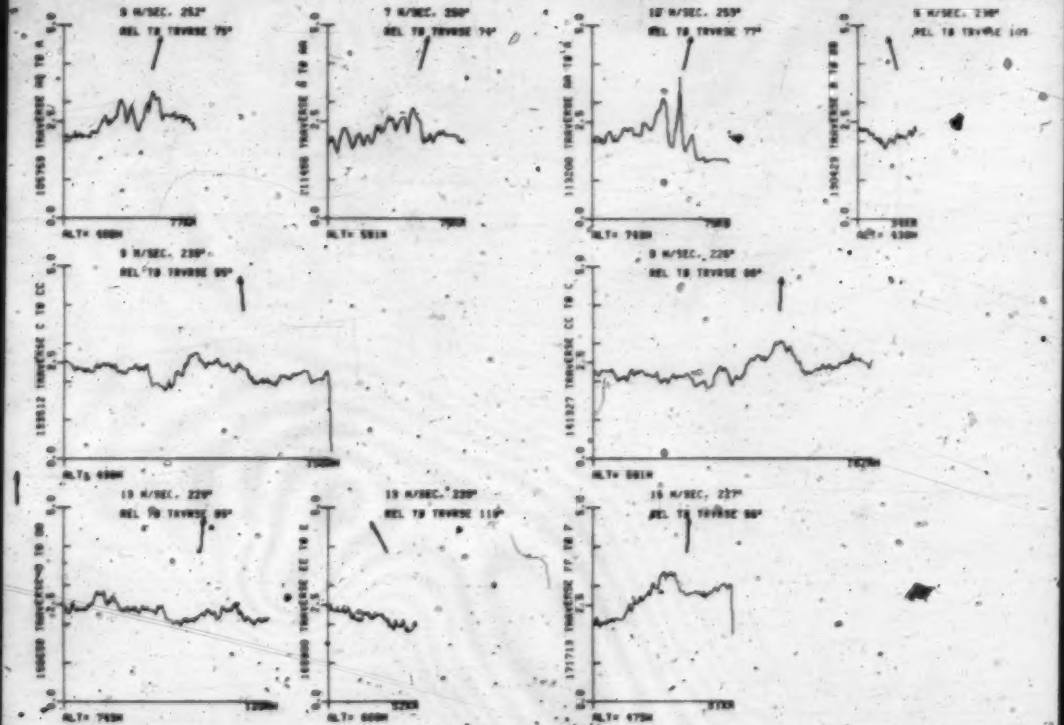






83 IN P.P.B.

MAP 4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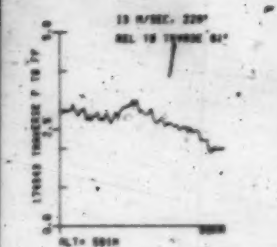
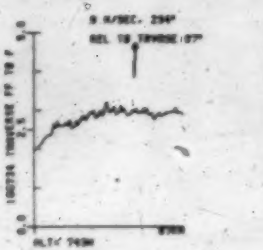
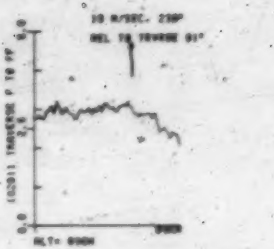
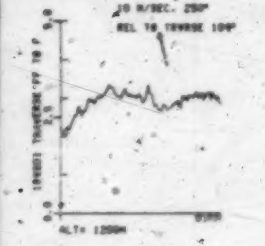
REL TO TRANSEC 70°
7 M/SEC. 250°
REL TO TRANSEC 74°
10 M/SEC. 253°
REL TO TRANSEC 77°
9 M/SEC. 230°
REL TO TRANSEC 109
9 M/SEC. 230°
REL TO TRANSEC 95°
9 M/SEC. 220°
REL TO TRANSEC 88°
19 M/SEC. 220°
REL TO TRANSEC 89°
19 M/SEC. 220°
REL TO TRANSEC 110°
19 M/SEC. 227°
REL TO TRANSEC 96°
BSCAT, IN 10**-3
MAP 4



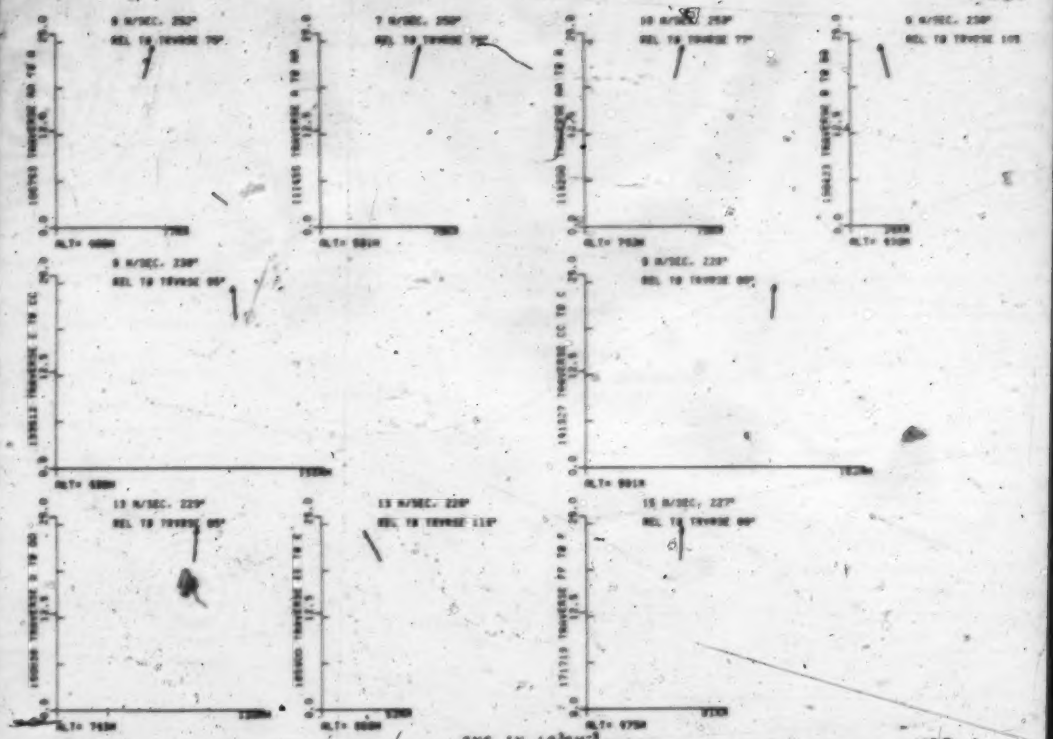




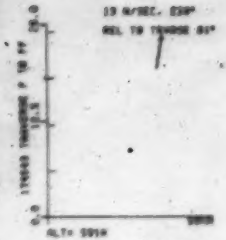


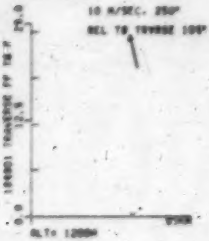
BSCAT IN $10^{-6}M^{-1}$

MAP 4


9 M/SEC. 250°
REL TO TRANSE 70°
7 M/SEC. 250°
10 M/SEC. 250°
REL TO TRANSE 77°
9 M/SEC. 230°
REL TO TRANSE 105
9 M/SEC. 230°
REL TO TRANSE 85°
9 M/SEC. 220°
REL TO TRANSE 85°
13 M/SEC. 220°
REL TO TRANSE 85°
13 M/SEC. 220°
REL TO TRANSE 115°
15 M/SEC. 227°
REL TO TRANSE 88°
CNC IN $10^3 CM^{-3}$

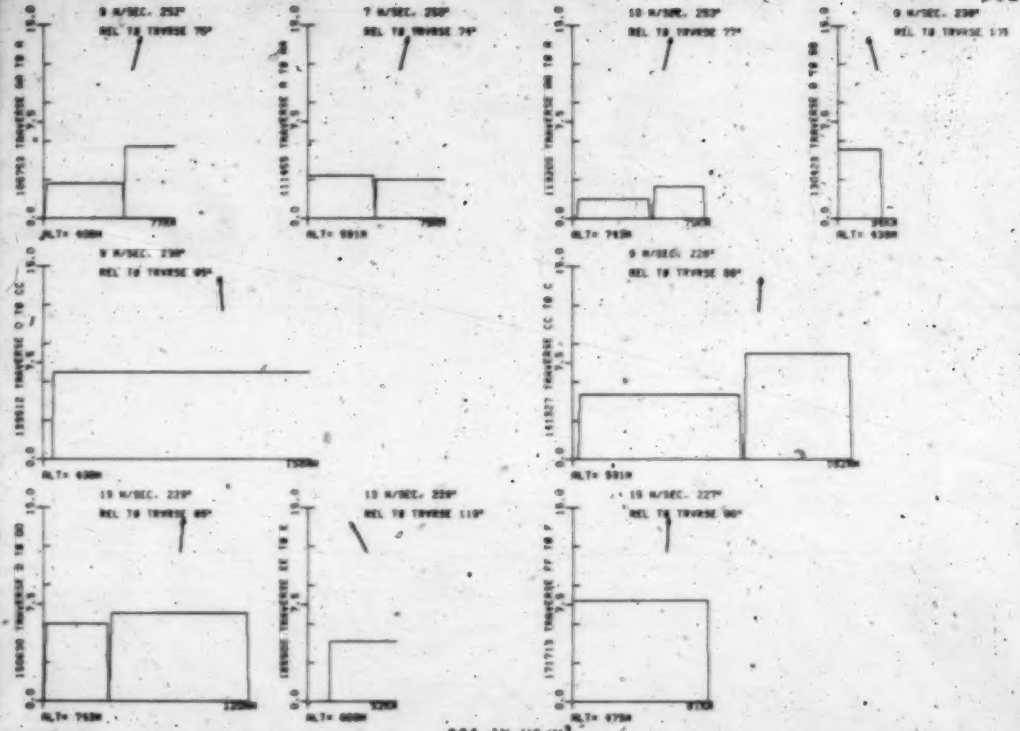
MAP 4





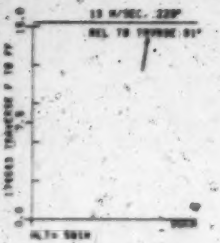
CNC IN $10^3 CM^{-3}$

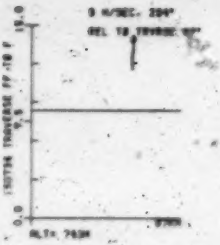
MAP 4

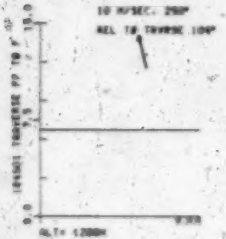


584 IN $\mu C/M^3$

MAP 4





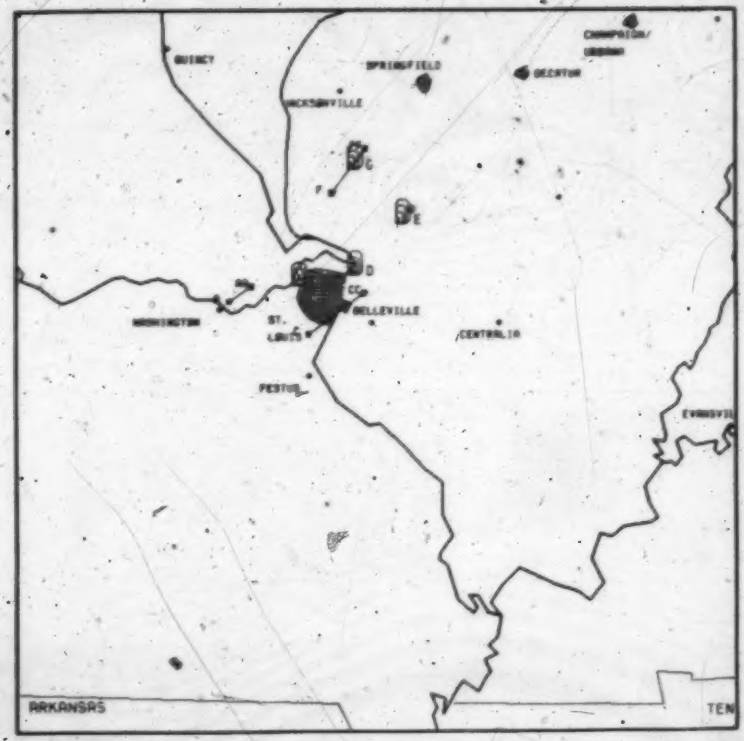


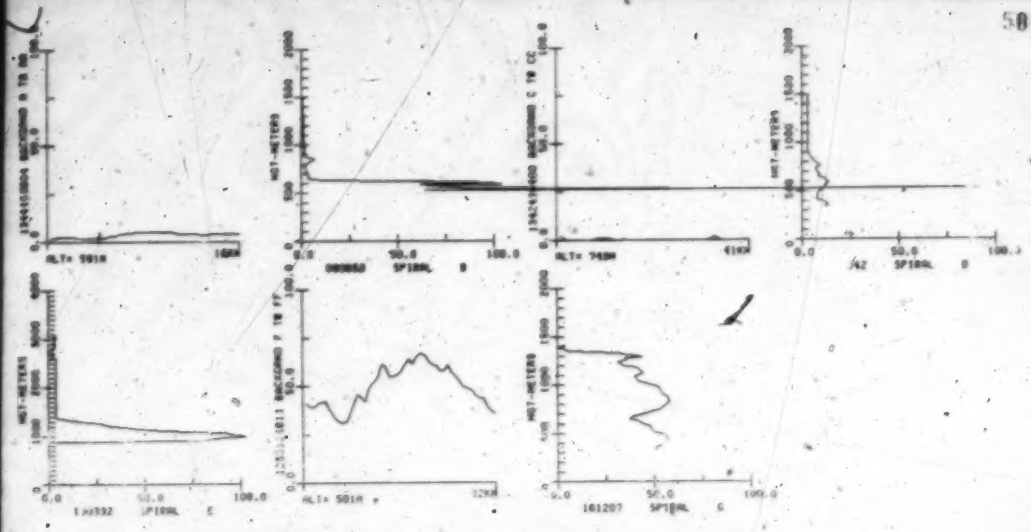
S84 IN UC/M³

MAP 4

W76006.VBL 7-9-76

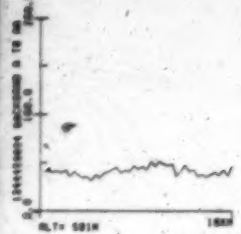
MAP 4

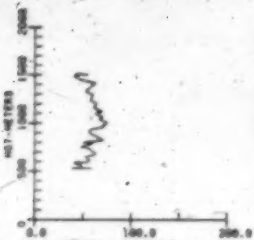


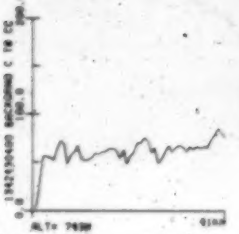


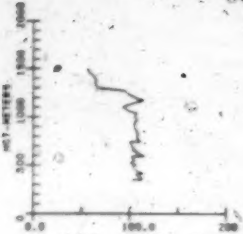
502 IN P.P.B.

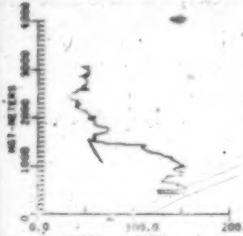
MAP 4

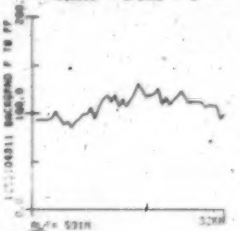


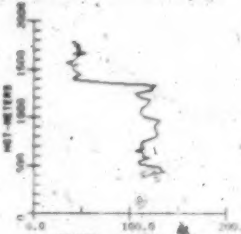


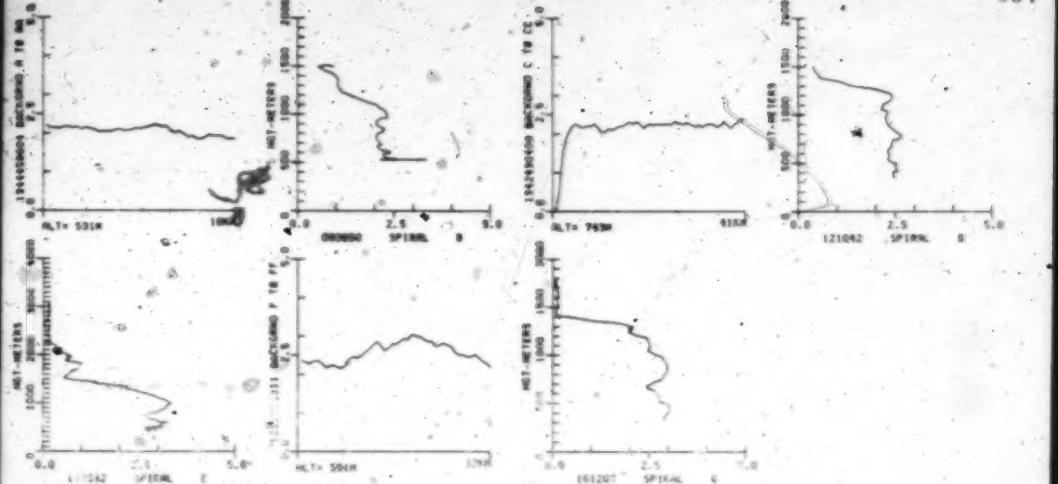






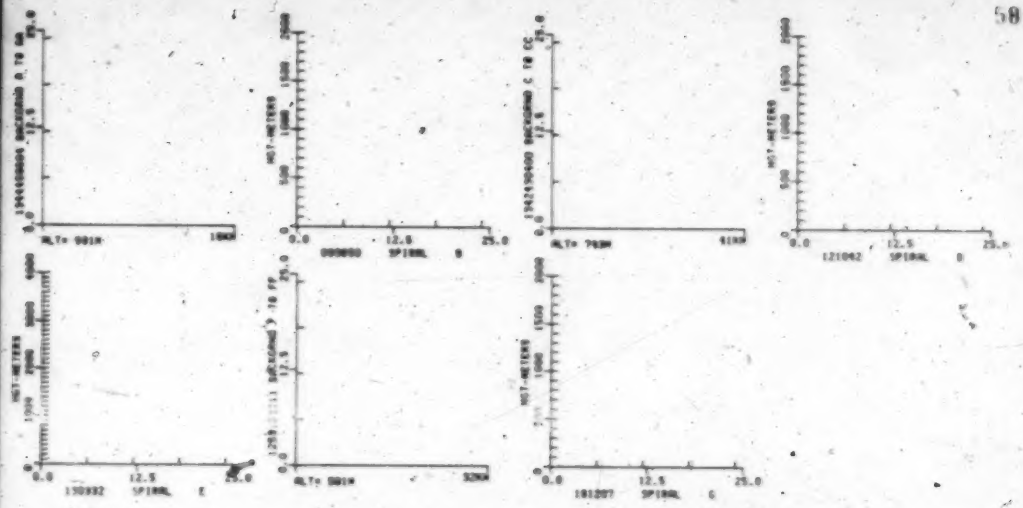






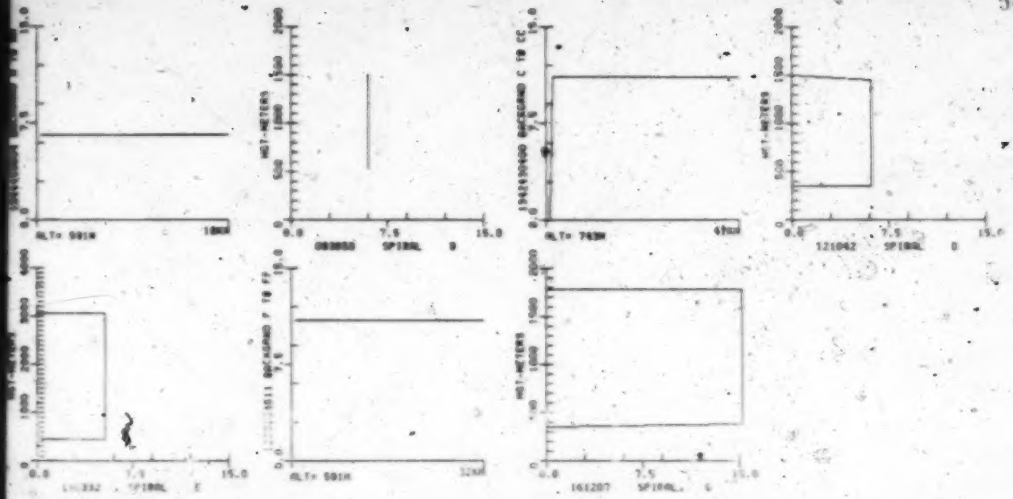
BSCAT IN 10^{-6} M^{-1}

MAP 4



CNC IN $10^3 CM^{-3}$

MAP 4

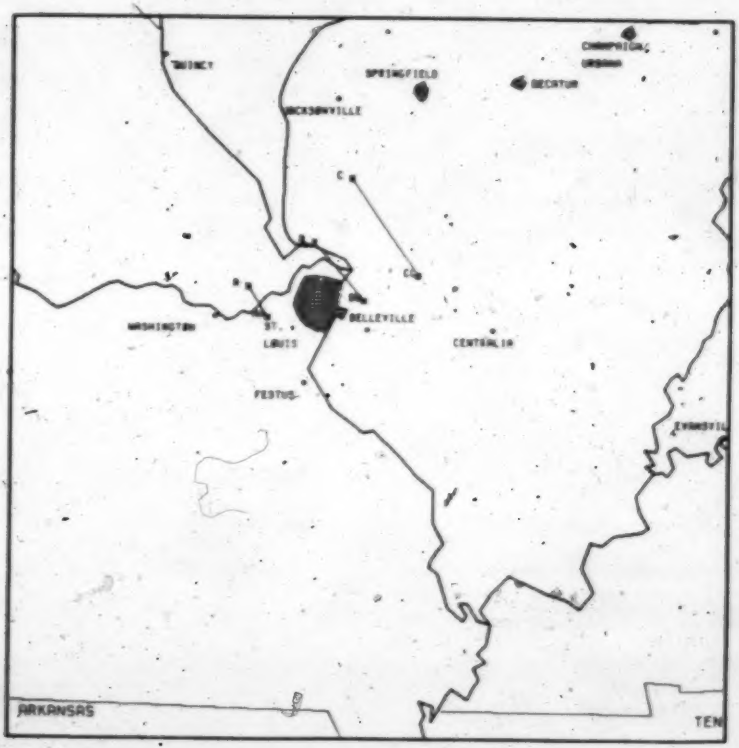


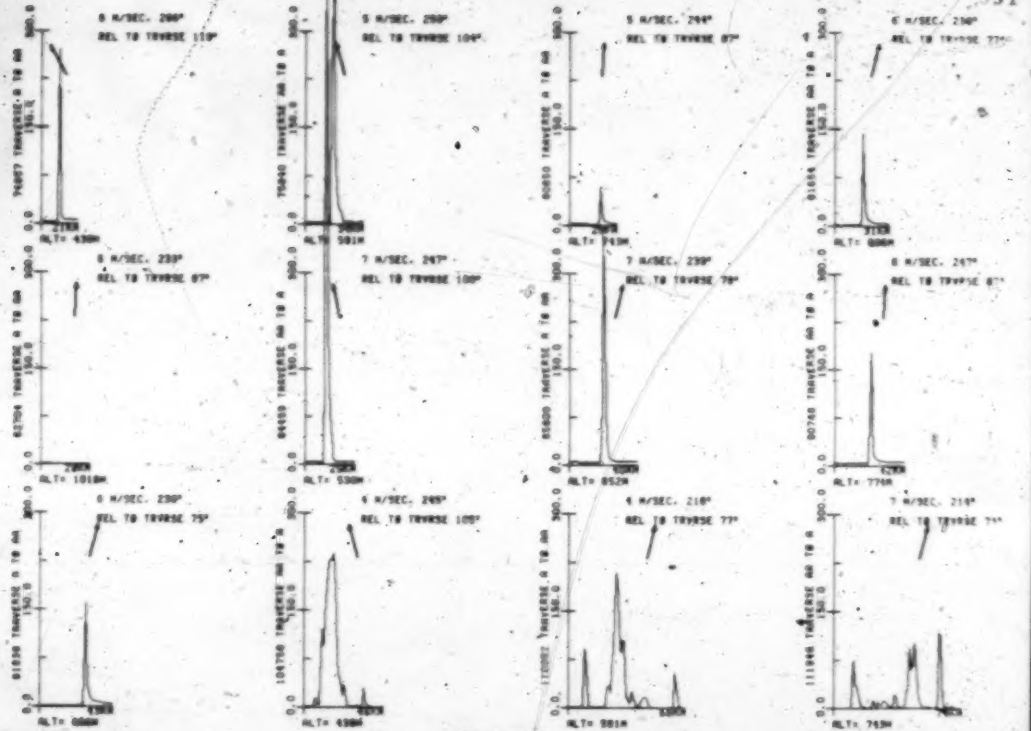
S04 IN UC/M³

MAP

W76006.VOL 7-9-76

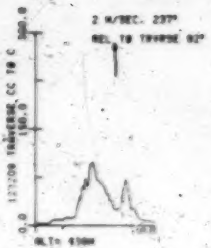
MAP 5

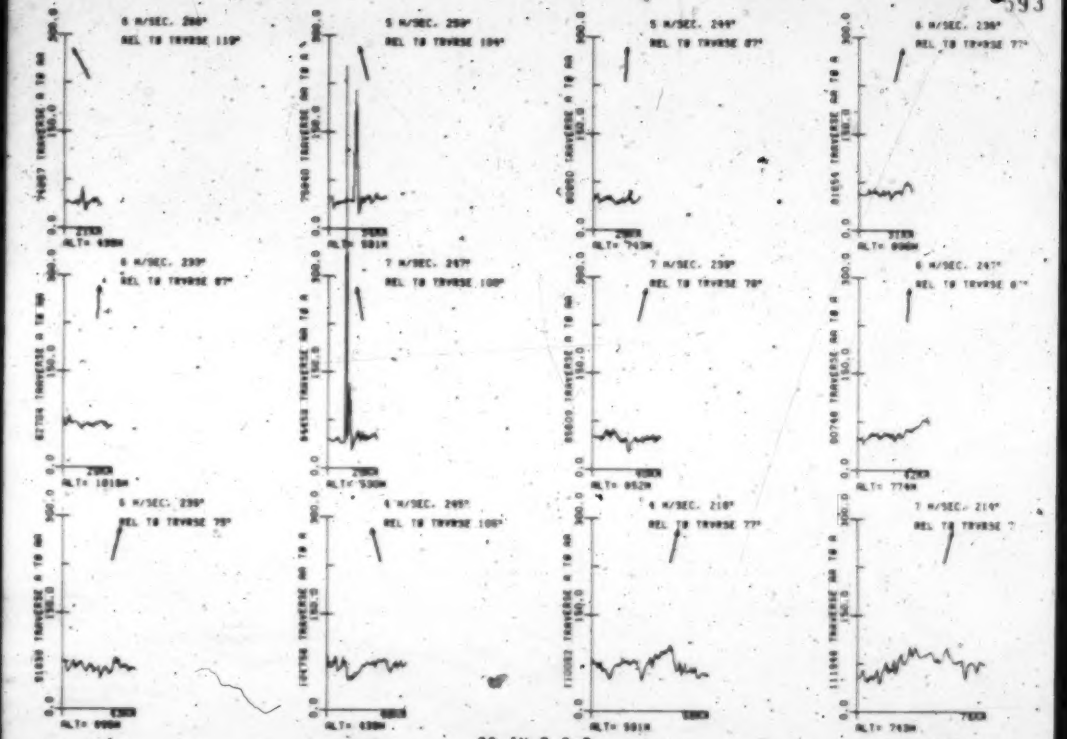




SO2 IN P.P.B.

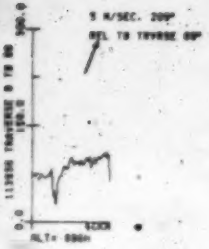
MAP 5

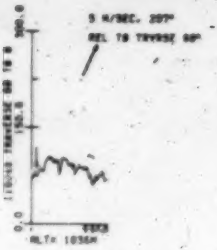


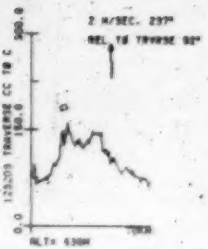


03 IN P.P.B.

MAP 5

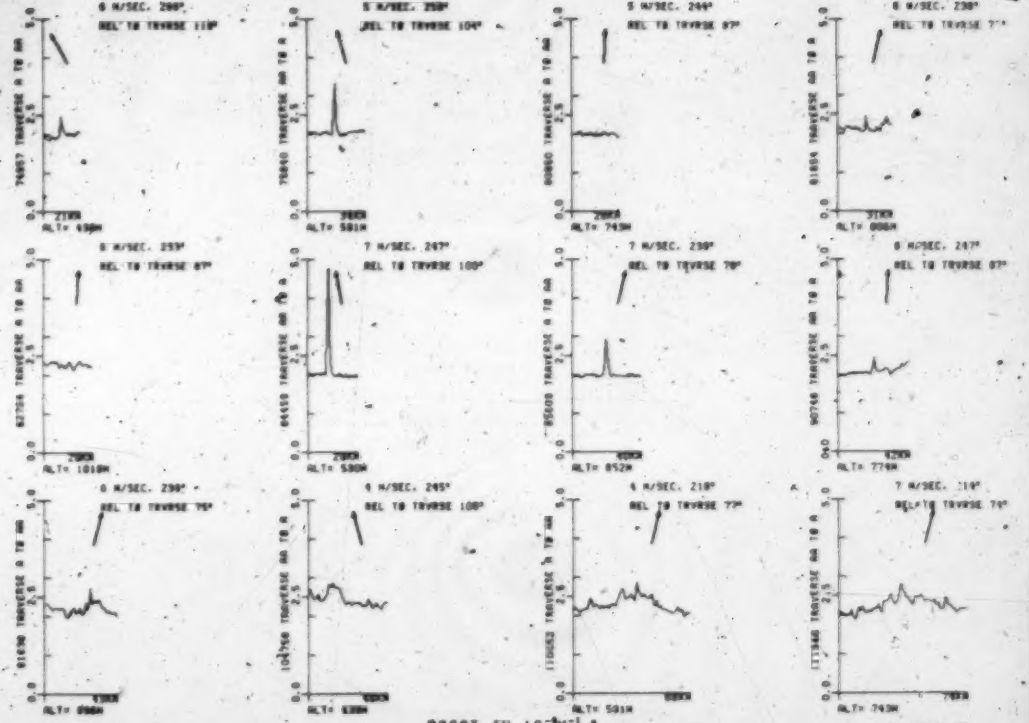






83 IN P.P.B.

MAP 5


6 M/SEC. 290°
REL TO TRVRSE 119°
5 M/SEC. 259°
REL TO TRVRSE 104°
5 M/SEC. 269°
REL TO TRVRSE 87°
6 M/SEC. 239°
REL TO TRVRSE 77°
6 M/SEC. 253°
REL TO TRVRSE 87°
7 M/SEC. 267°
REL TO TRVRSE 100°
7 M/SEC. 239°
REL TO TRVRSE 79°
6 M/SEC. 247°
REL TO TRVRSE 87°
6 M/SEC. 230°
REL TO TRVRSE 79°
6 M/SEC. 245°
REL TO TRVRSE 100°
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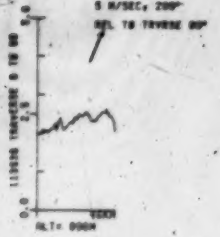
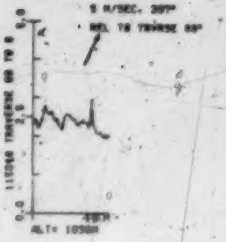
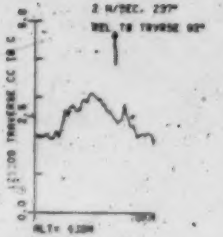
REL TO TRVRSE 72°
7 M/SEC. 219°
REL TO TRVRSE 79°
BSCAT IN 10⁻⁶M⁻¹ •
MAP 5

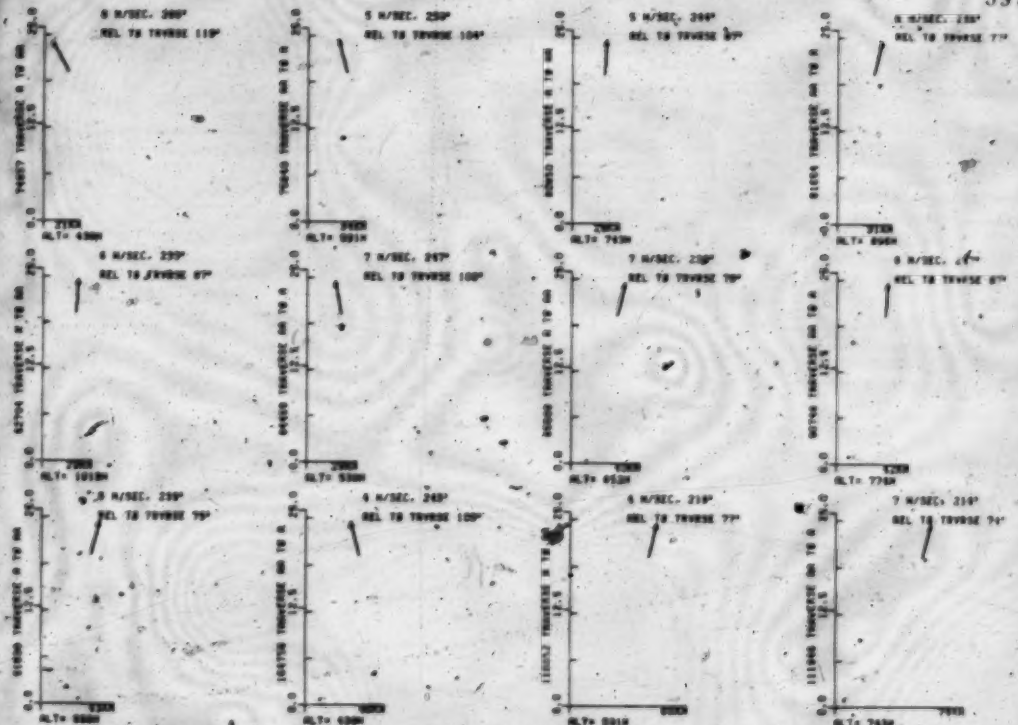




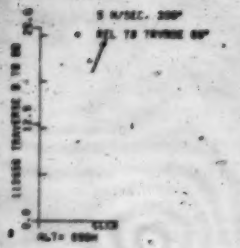


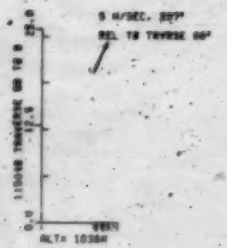
BSCAT IN $10^{-4}M^{-1}$

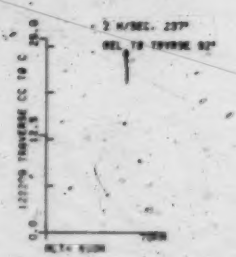
MAP 5



MAP 5

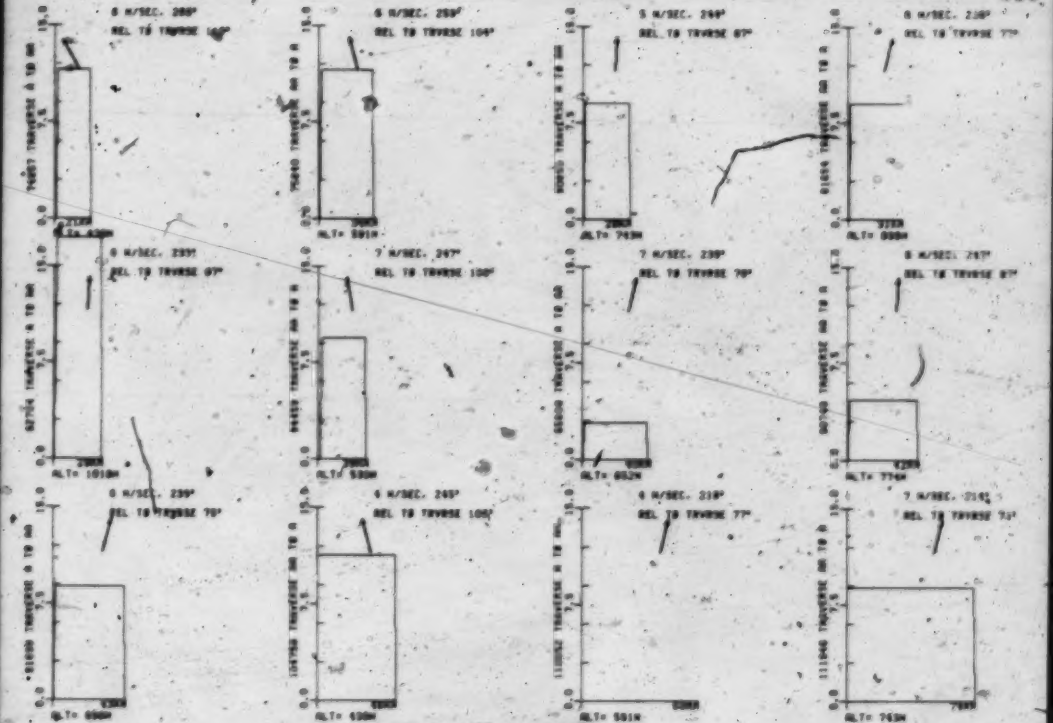






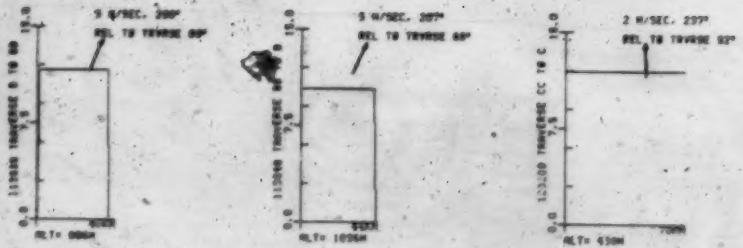
CNC IN $10^3 CM^{-3}$

MAP 5



384 IN UC/H³

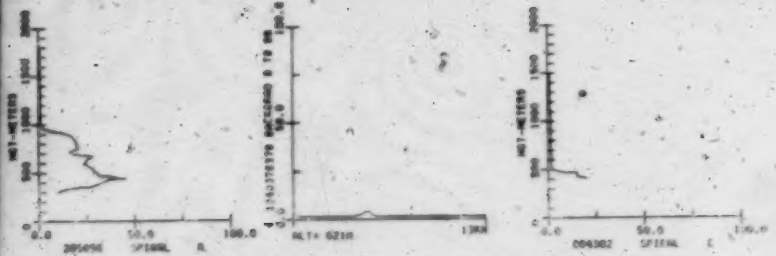
MAP 5



SO4 IN UG/M³

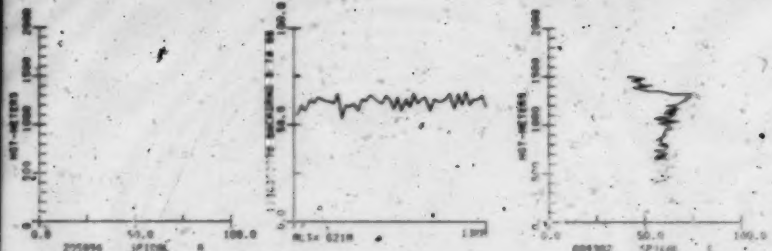
MAP 5

W76007.VOL 7-9+10-76 MAP 5



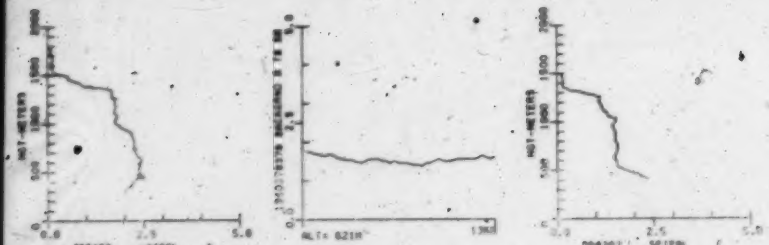
502 IN P.P.B.

MAP 5



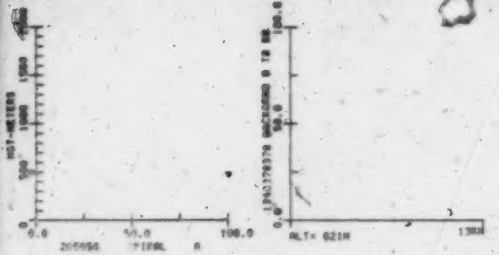
03 IN P.P.B.

MAP 5



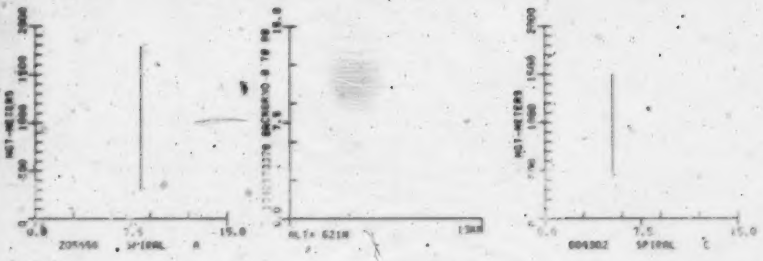
BSCAT IN $10^{-4}M^{-1}$

MAP 5



CNC IN $10^3 CM^{-3}$

MAP 5

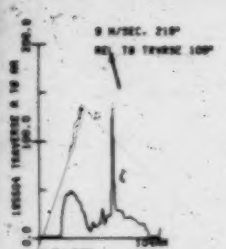


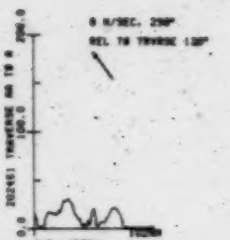
.504 IN UC/M³

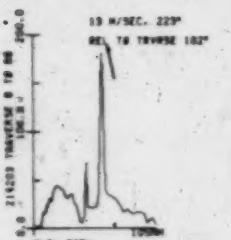
MAP 5

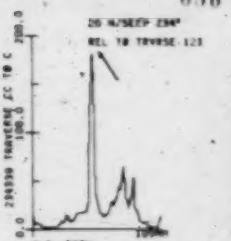
W76007.VØL 7-9+10-76

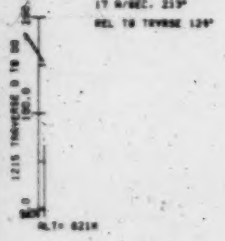
MAP 6

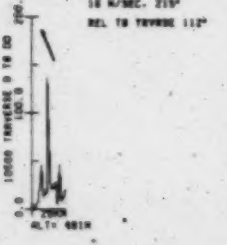


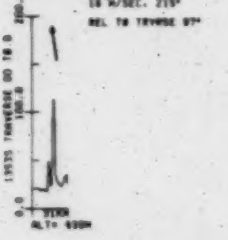






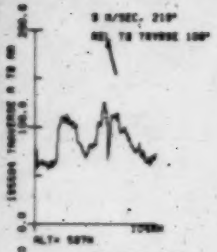


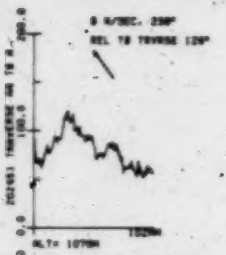


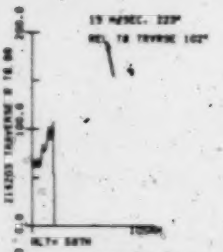


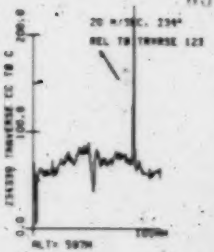
SB2 IN P.P.B.

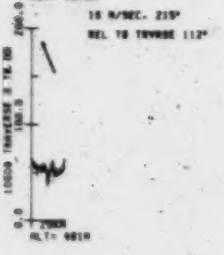
MAP 6





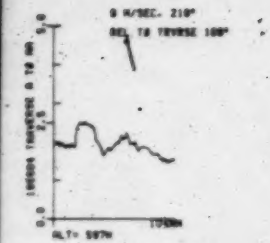


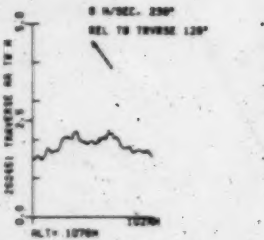


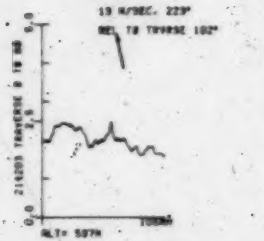


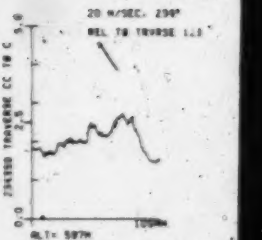
83 IN P.P.B.

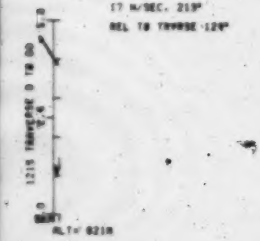
MAP C

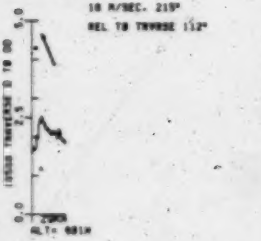






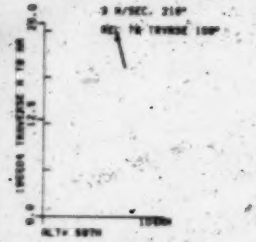


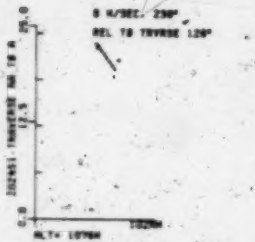


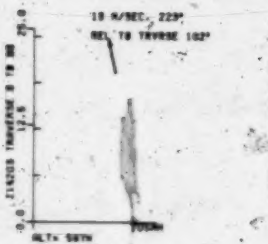


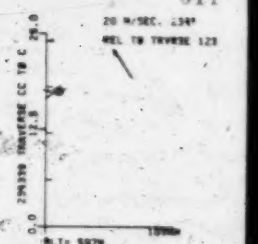
BSCAT IN $10^{-6}M^{-1}$

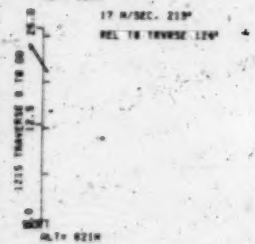
MAP 6

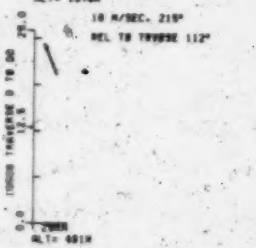


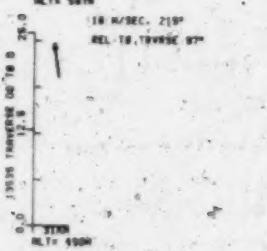






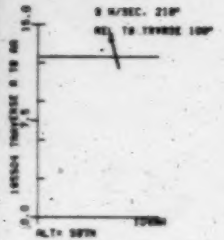


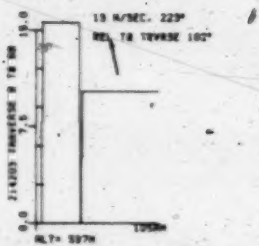


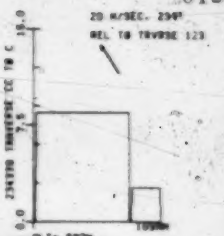


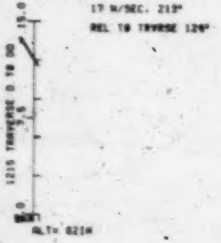
CNC IN $10^3 CM^{-3}$

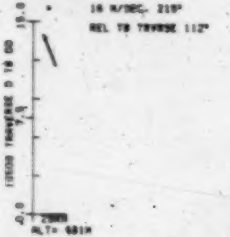
MAP 8

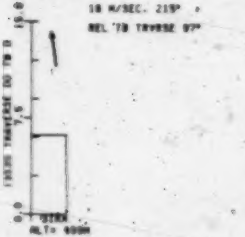








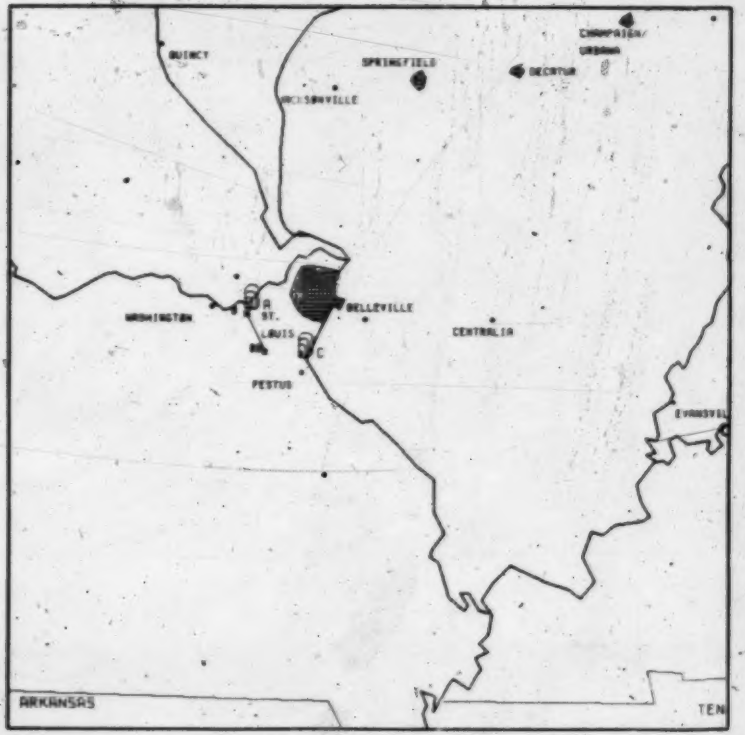


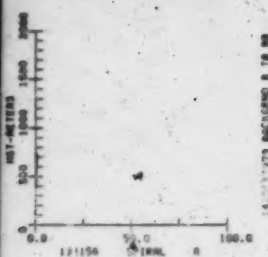


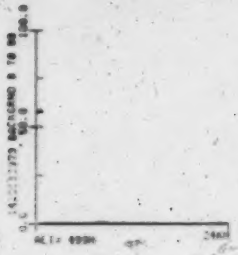
SO4 IN UC/M³

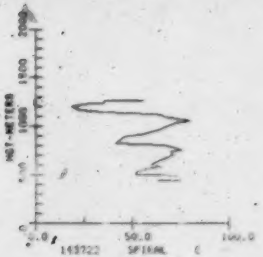
MAP 5

W76009.VOL 7-12-76 MAP 6



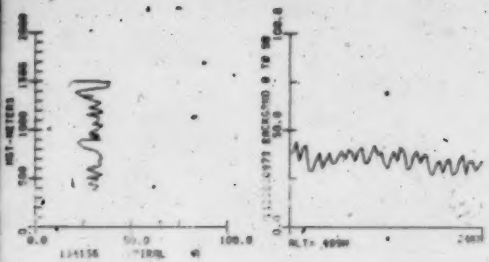


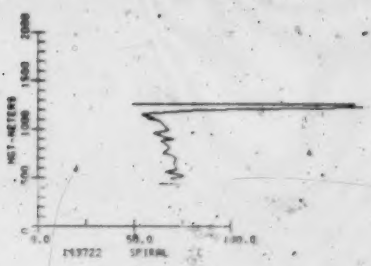




SO2 IN P.P.B.

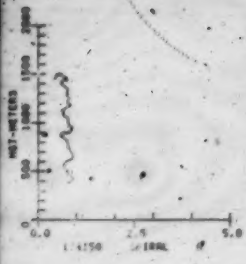
MAP 5

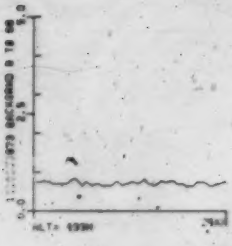


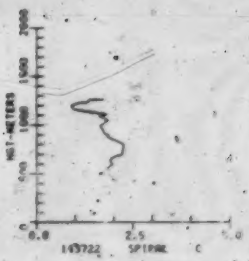


93 IN P.P.B.

MAP

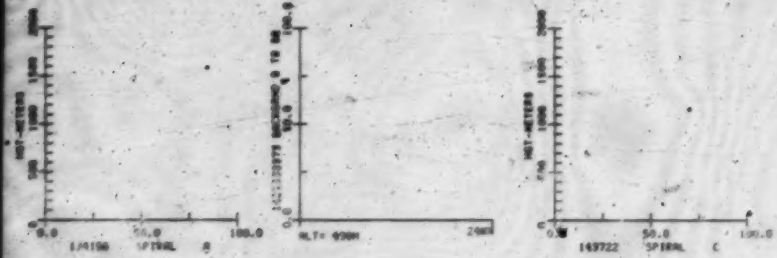






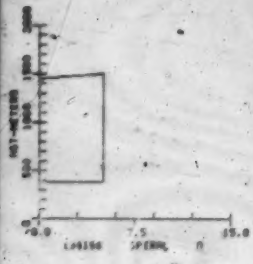
BSCAT IN 10^{-5} M^{-1}

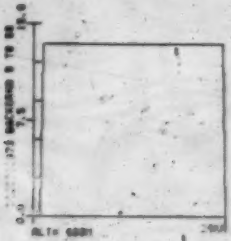
MAP 5

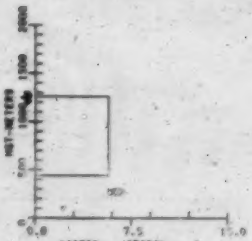


ENC IN $10^{5}CM^{-3}$

MAE C



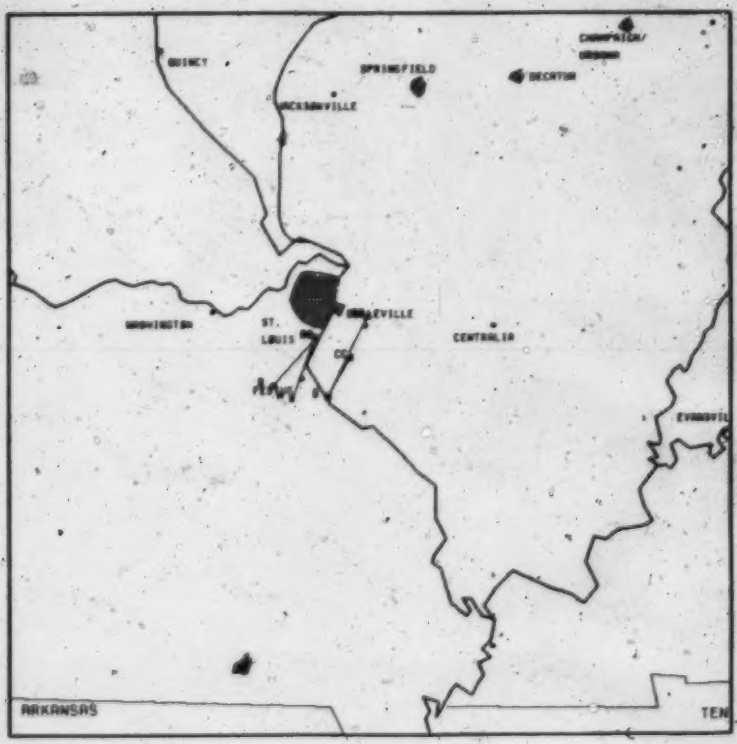


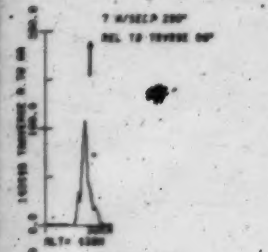


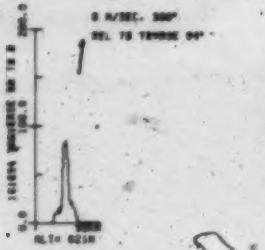
S04 IN UC/M³.

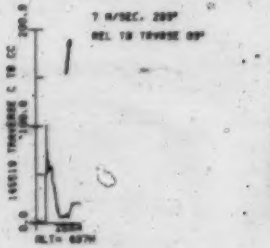
MHP

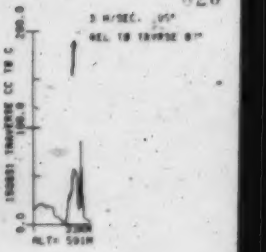
W76009.VØL 7-12-76 MAP 7

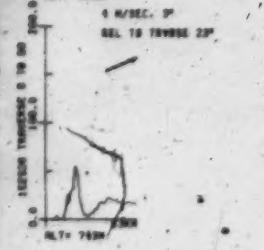






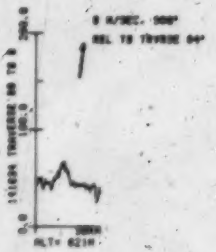


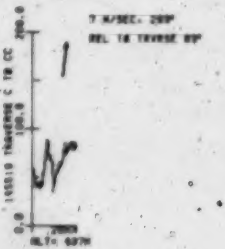


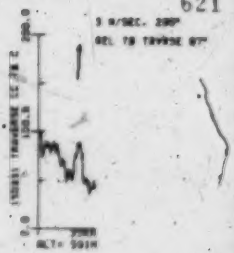


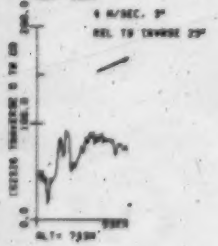
582 IN P.P.B.

MAP 7



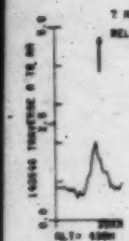


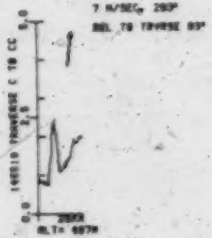


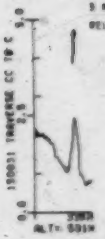


93 IN P.P.B.

MAP 7

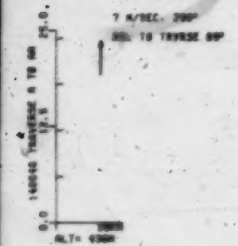


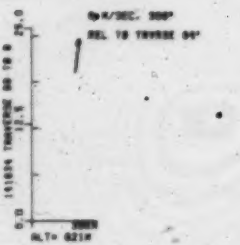


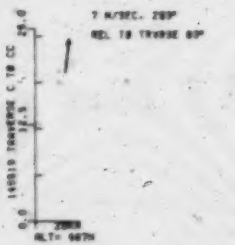


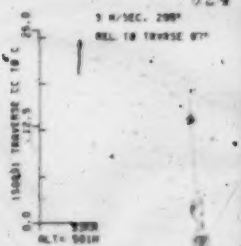
BSCAT IN $10^{-6}M^{-1}$

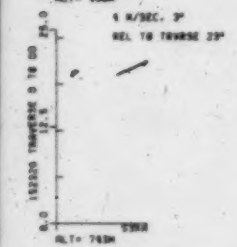
MAP 7







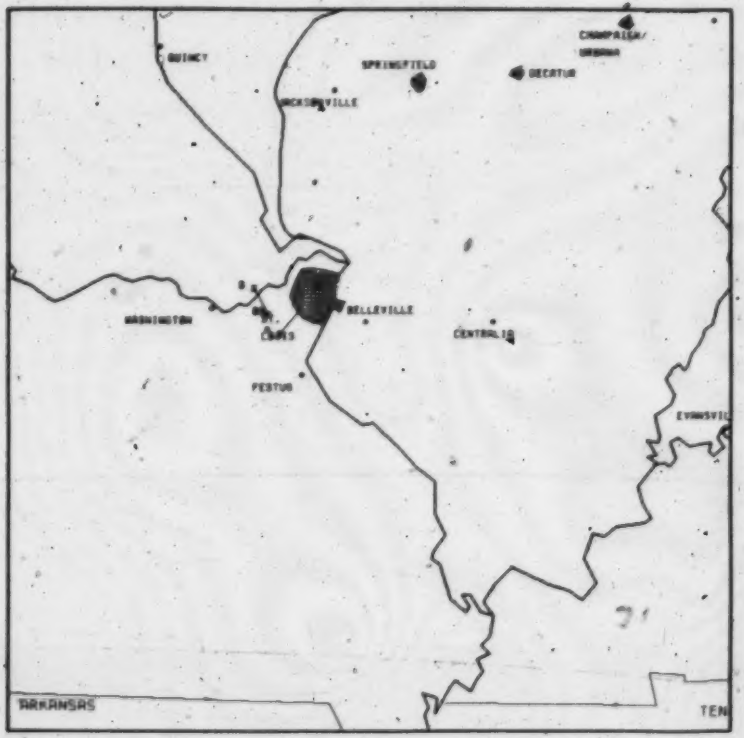


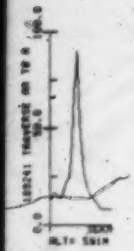


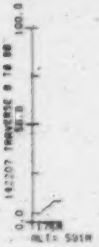
CNC IN $10^3 CM^{-3}$

MAP 7

W76011.VOL 7-13-76 MAP 8

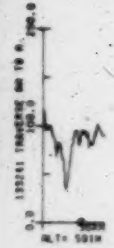


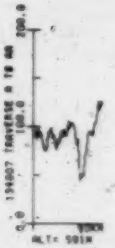


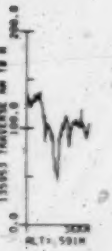


SO2 IN P.P.B.

MAP 8

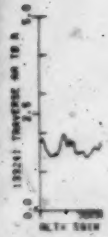


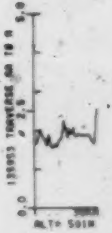




03 IN P.P.B.

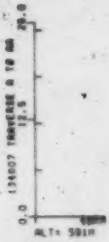
MAP 8

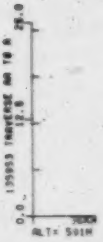


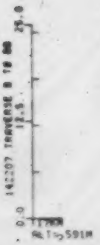


BSCAT IN 10^{-6} M^{-1}

MAP 8

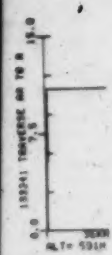






CNC IN $10^3 CM^{-3}$

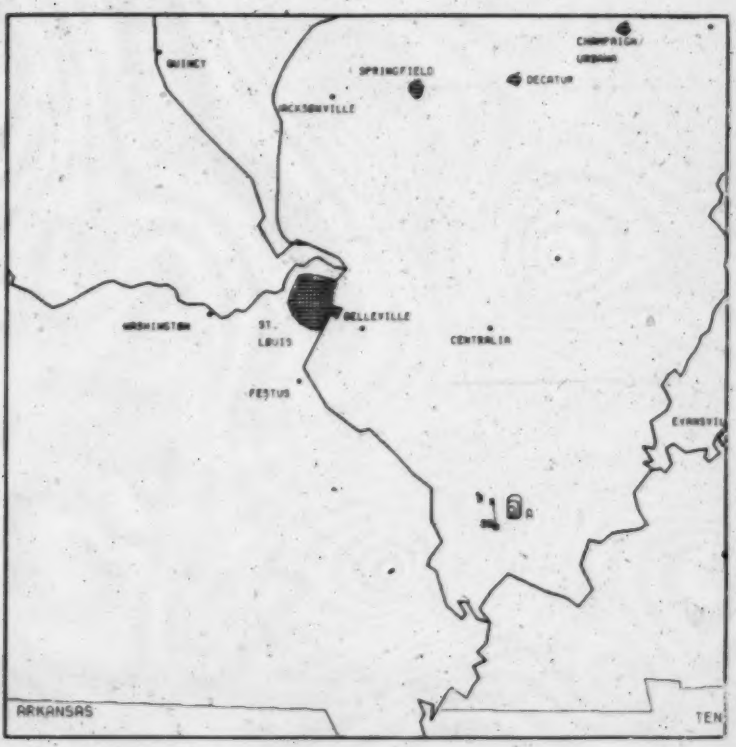
MAP 8

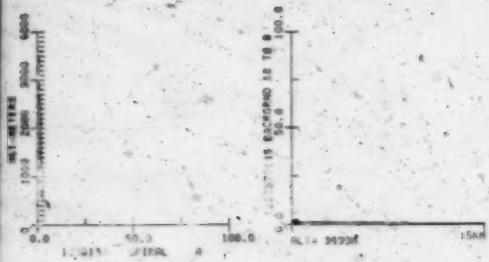


SO4 IN UC/M³

MAP 8

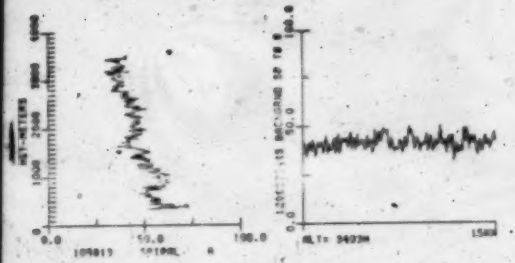
W76012.VOL 7-14-76 MAP 7





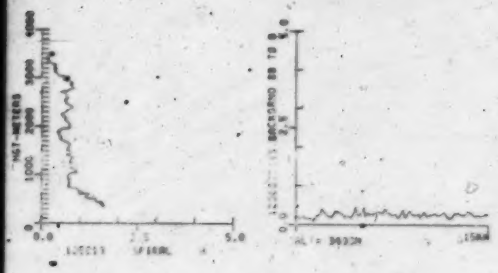
SO2 IN P.P.B.

MAP 7



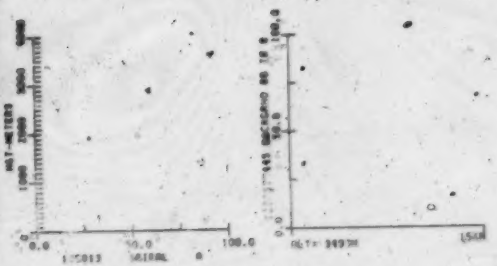
03 IN P.P.B.

MAP 7

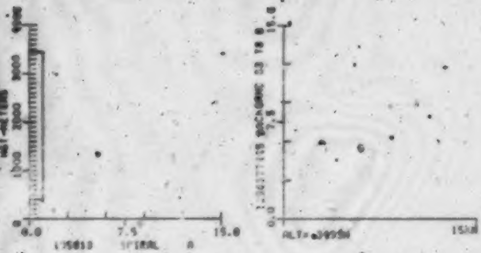


BSCAT IN 10^{-4} M^{-1}

MEP

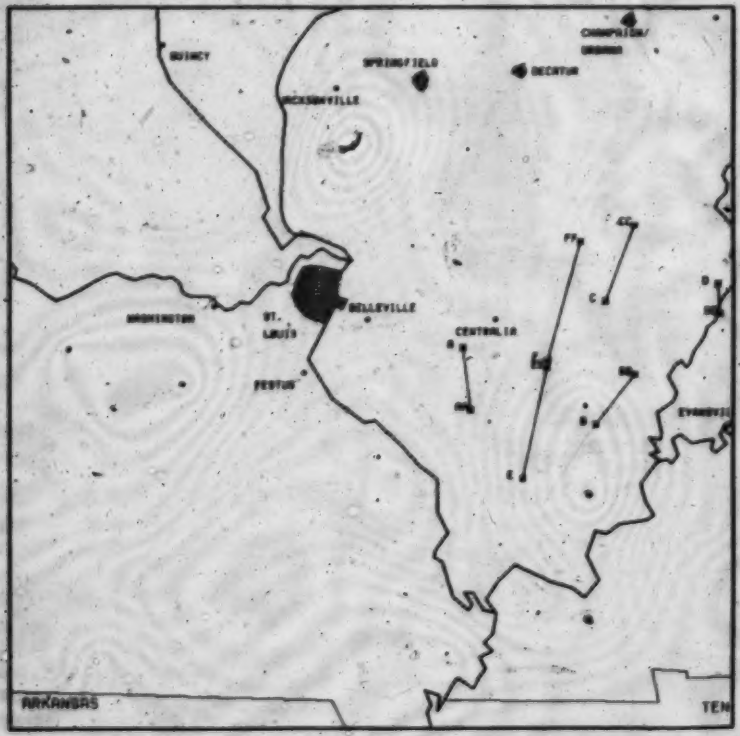


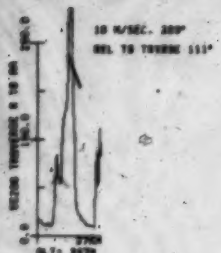
CNC IN $10^3 CM^{-3}$

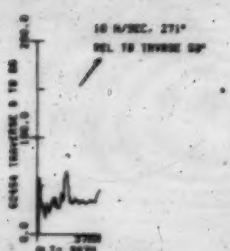


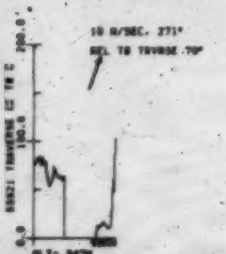
SO4 IN UC/M³

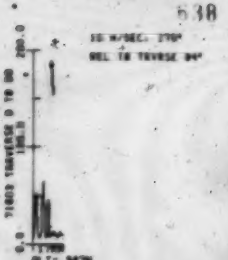
W76012.VOL 7-14-76 MAP 9

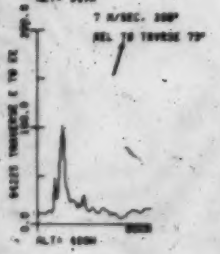


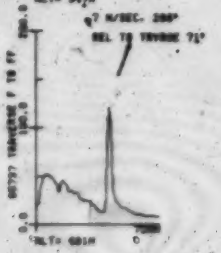


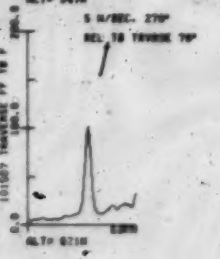


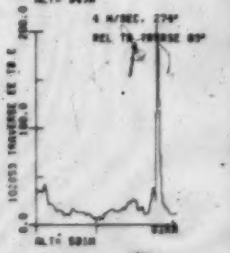






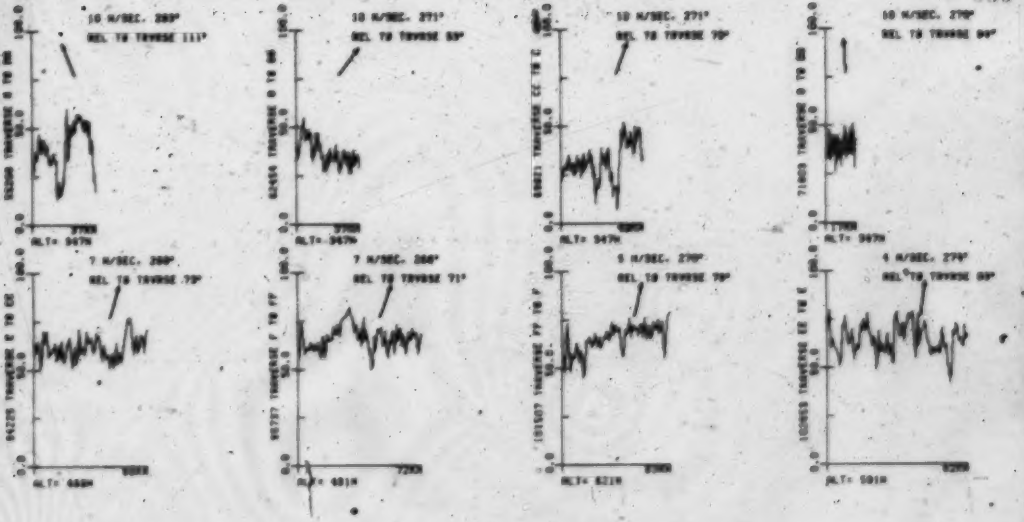






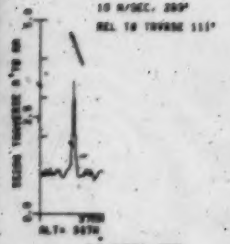
SB2 IN P.P.B.

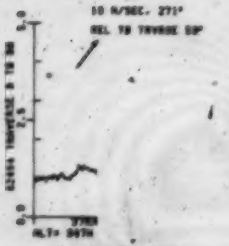
MAP 9

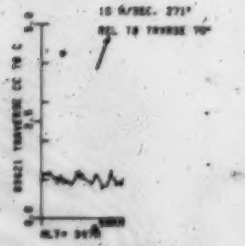


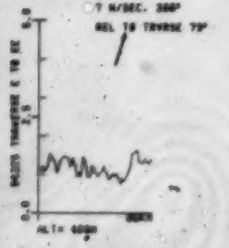
83 IN P.P.B.

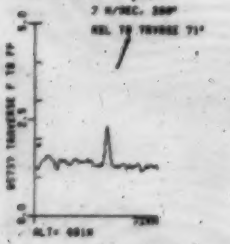
MAP 9

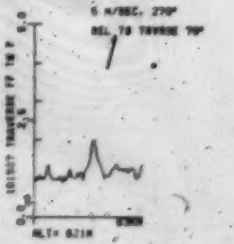


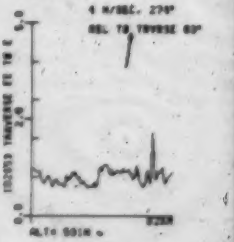






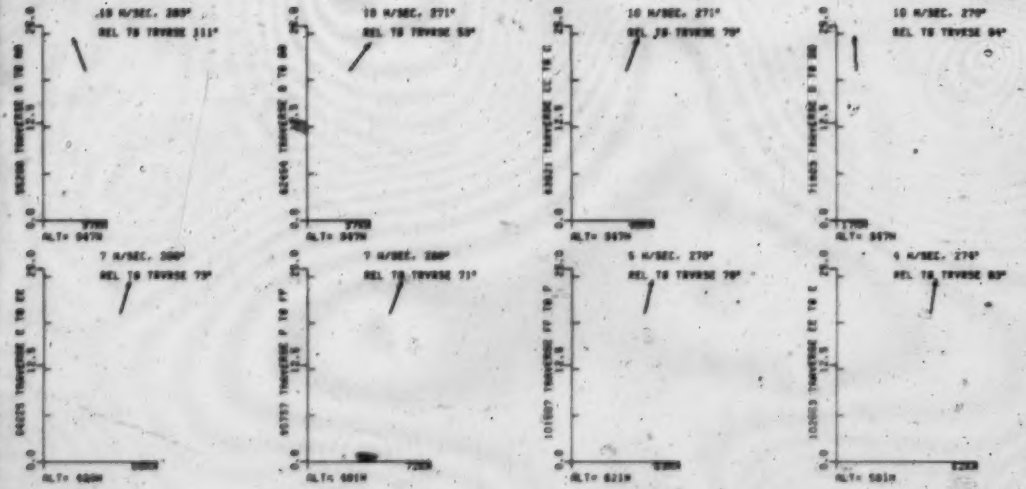






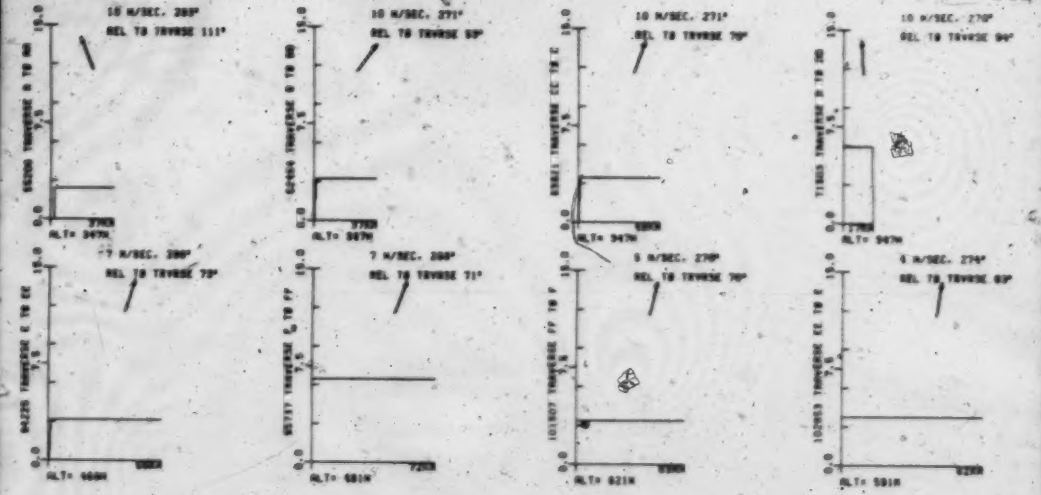
BSCAT IN $10^{-5}M^{-1}$

MAP 9



CNC IN $10^3 CM^{-3}$

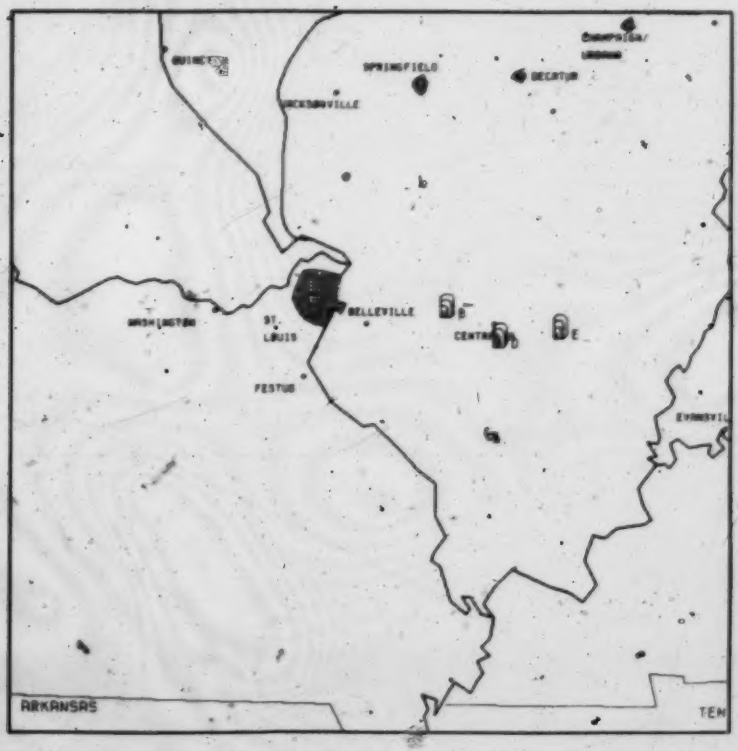
MAP 9

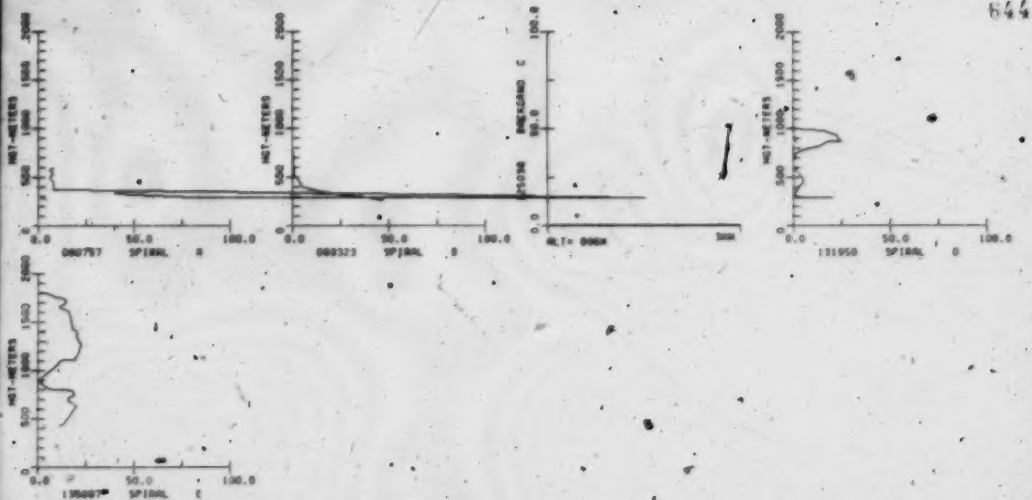


S04 IN UC/M³

MAP 9

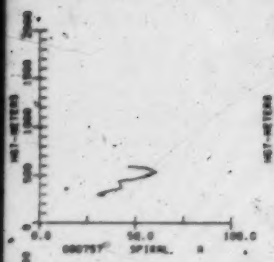
W76014.VOL 7-15-76 MAP 8.

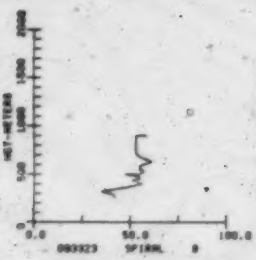


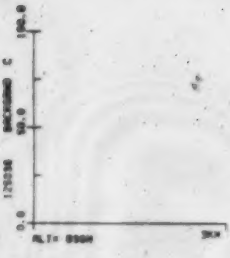


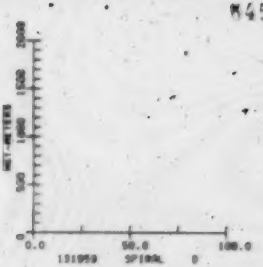
SB2 IN P.P.B.

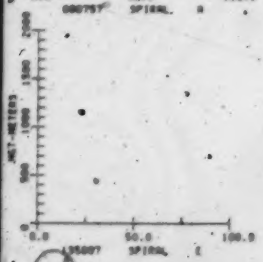
MAP 8





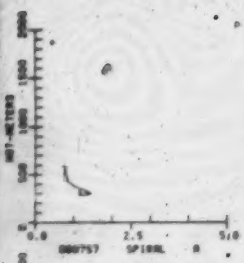


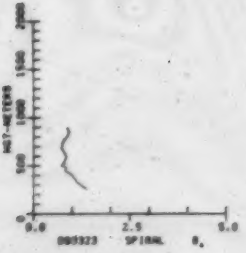


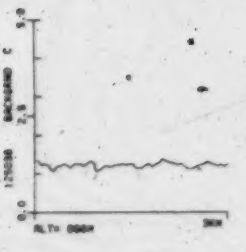


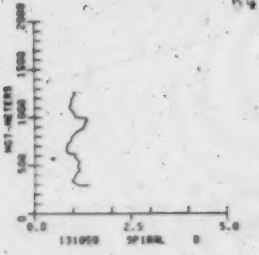
03 IN P.P.B.

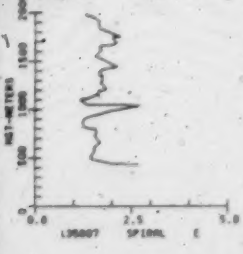
MAP 8





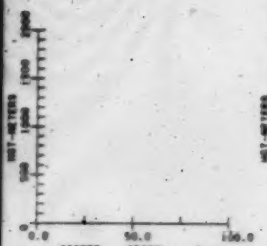


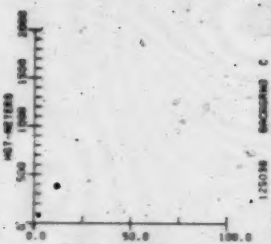


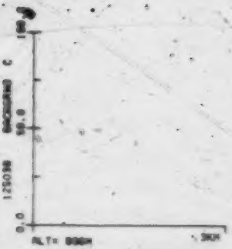


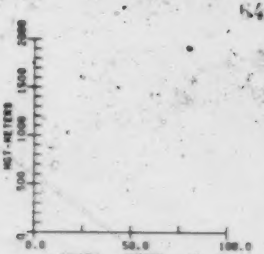
BSCAT IN $10^{-6}M^{-1}$

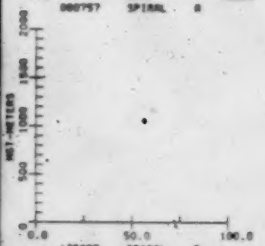
MAP 8





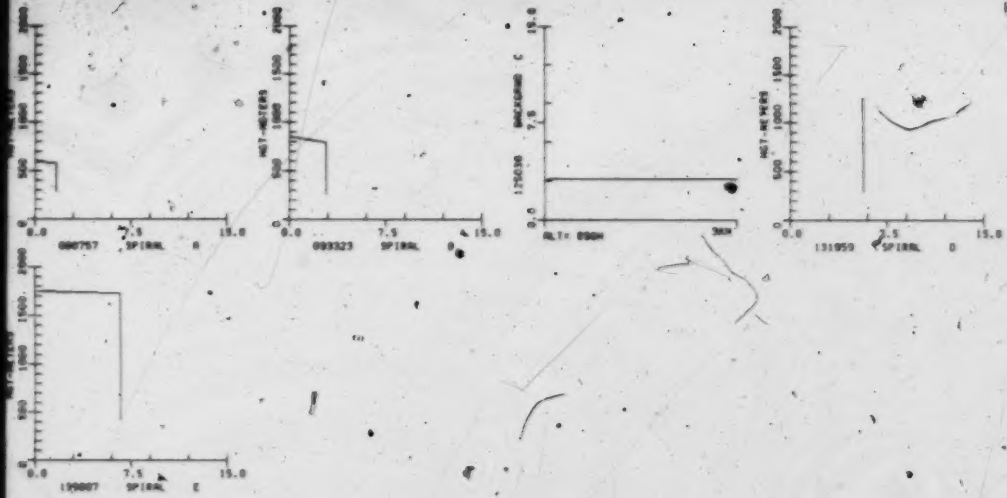






CNC IN $10^3 CM^{-3}$

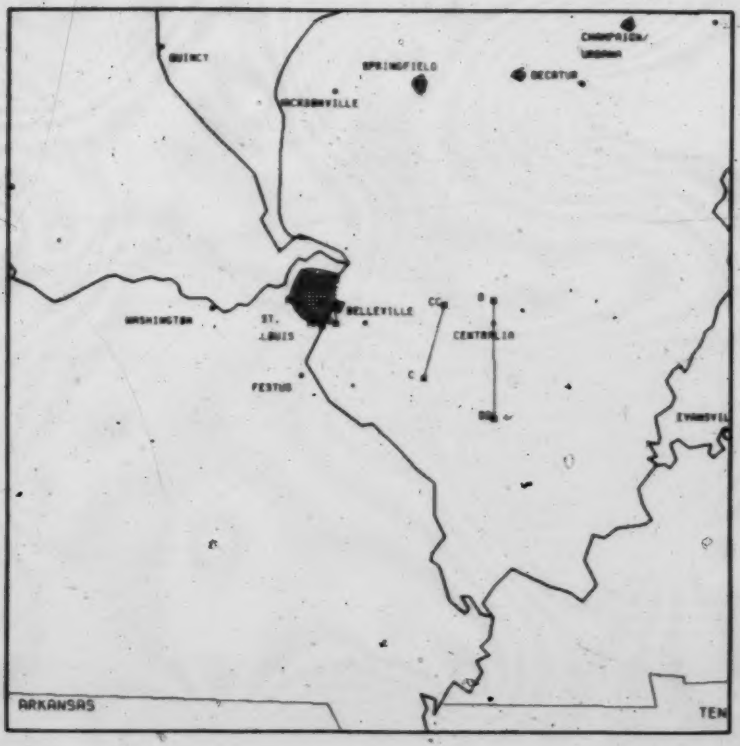
MAP 8

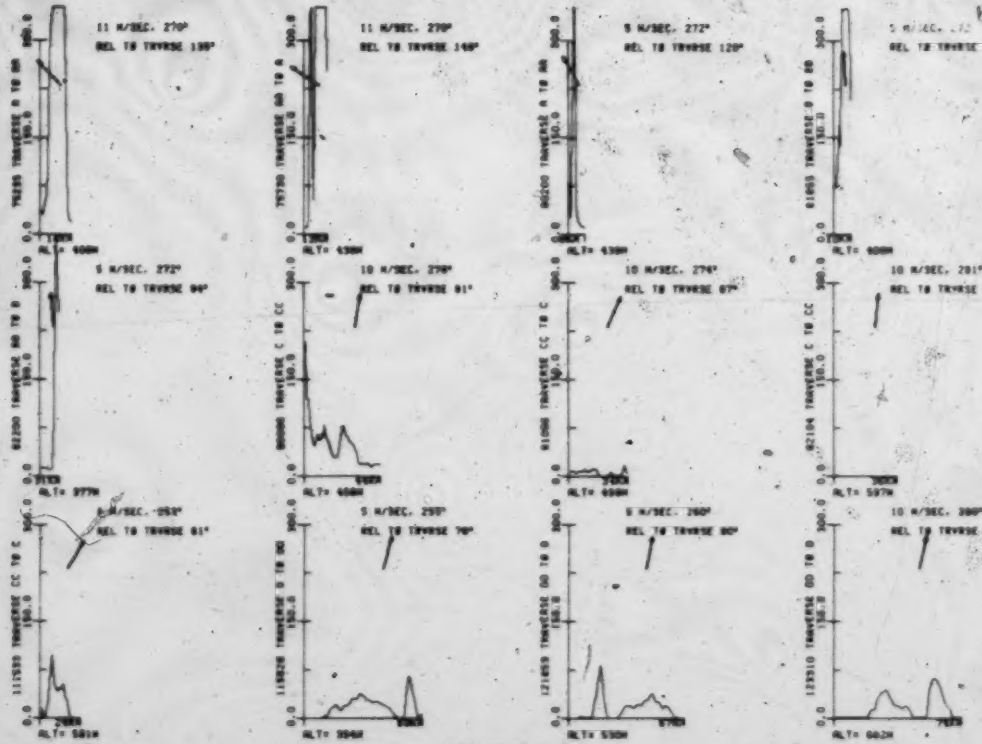


S04 IN UC/M³

MAP 8

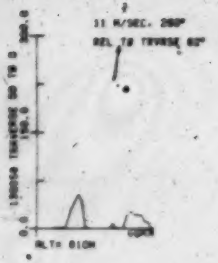
W76014.VØL 7-15-76 MAP 10





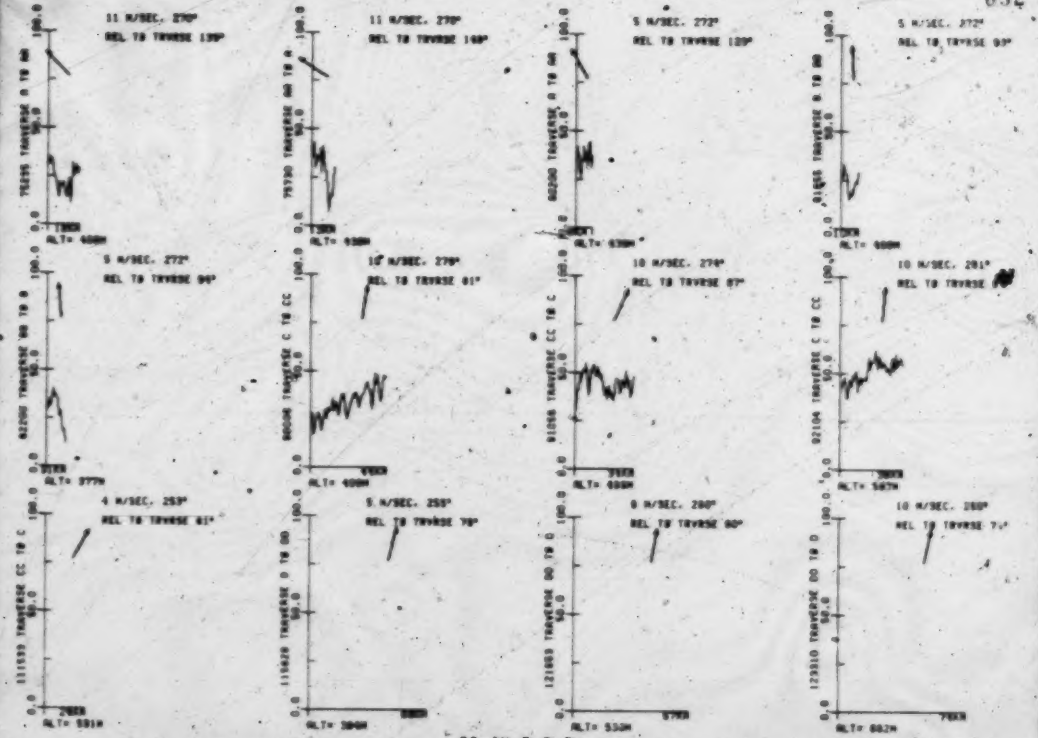
SO2 IN P.P.B.

MAP 10



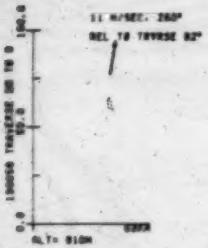
382 IN P.P.B.

MAP 10



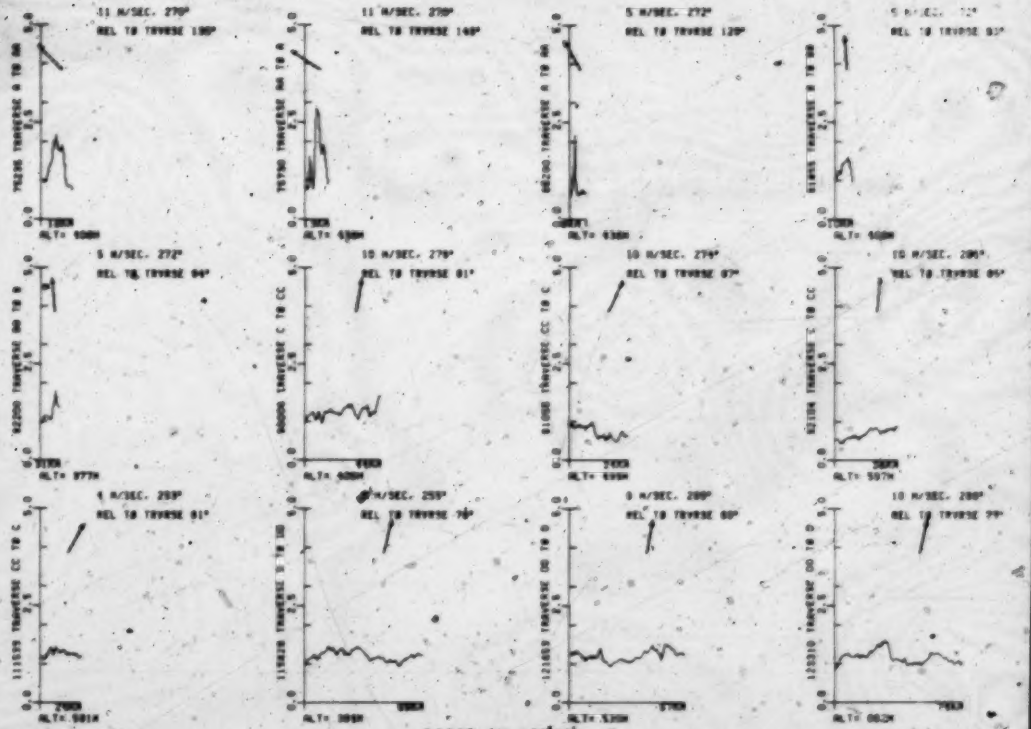
83 IN P.P.B.

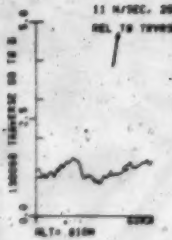
MAP 10



03 IN P.P.B.

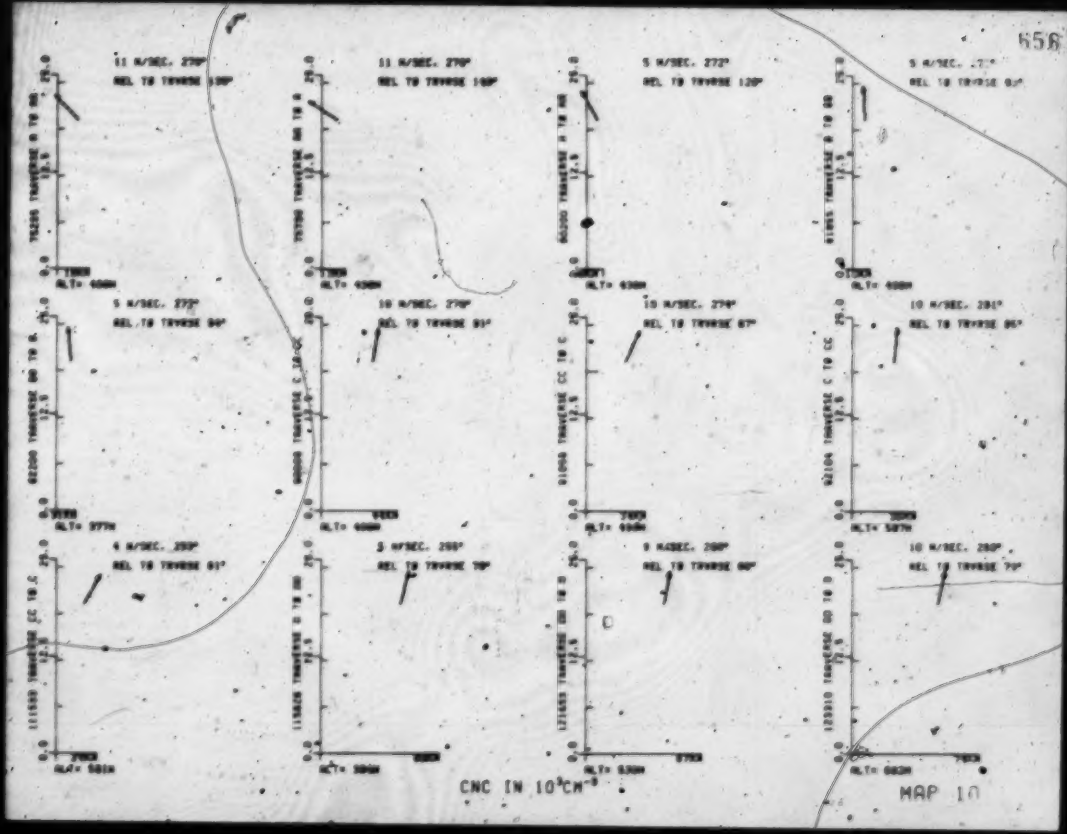
MAP 10


11 M/SEC. 270°
REL TO TRVRSE 180°
11 M/SEC. 270°
REL TO TRVRSE 140°
5 M/SEC. 272°
REL TO TRVRSE 120°
5 M/SEC. 272°
REL TO TRVRSE 94°
10 M/SEC. 270°
REL TO TRVRSE 81°
10 M/SEC. 270°
REL TO TRVRSE 87°
10 M/SEC. 280°
REL TO TRVRSE 85°
9 M/SEC. 259°
REL TO TRVRSE 81°
9 M/SEC. 259°
REL TO TRVRSE 76°
9 M/SEC. 280°
REL TO TRVRSE 80°
10 M/SEC. 280°
REL TO TRVRSE 79°
BSCAT IN 10⁻⁶M⁻¹



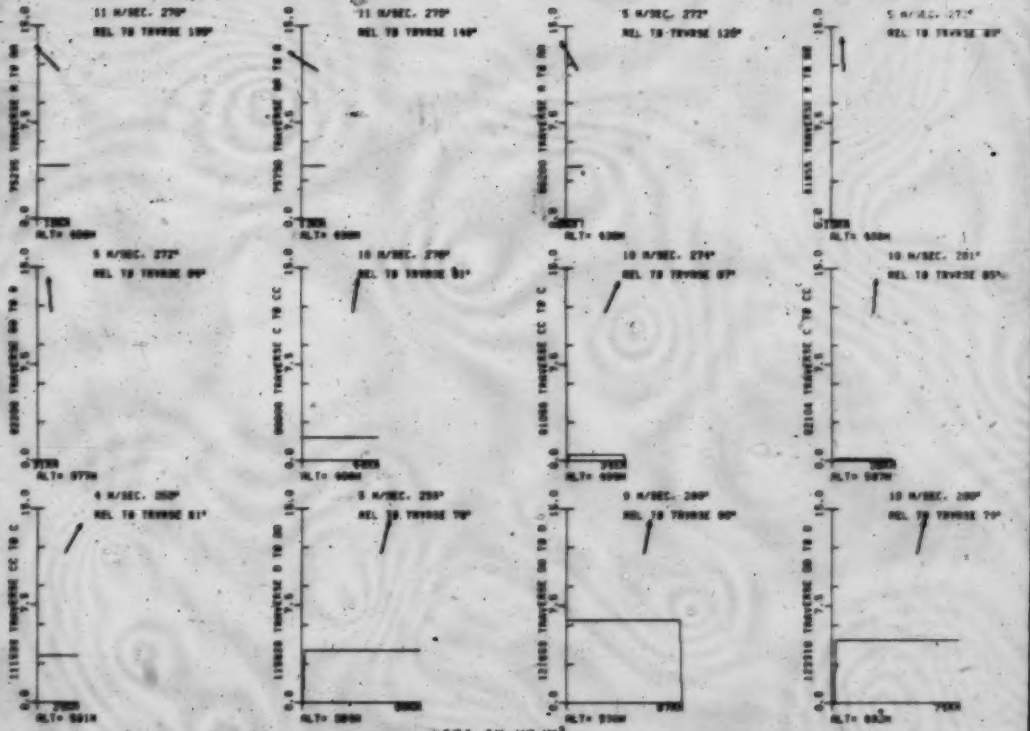
BSCAT IN $10^{-6}M^{-1}$

MAP 10


11 M/SEC. 270°
11 M/SEC. 270°
5 M/SEC. 272°
5 M/SEC. 272°
10 M/SEC. 270°
10 M/SEC. 270°
10 M/SEC. 281°
4 M/SEC. 259°
5 M/SEC. 259°
9 M/SEC. 280°
10 M/SEC. 280°
CNC IN $10^3 CM^{-3}$
MAP 10

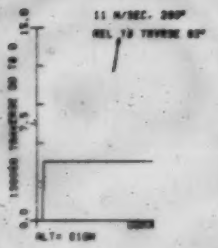
CNC IN $10^3 CM^{-3}$

MAP 10



SB4 IN UC/M³

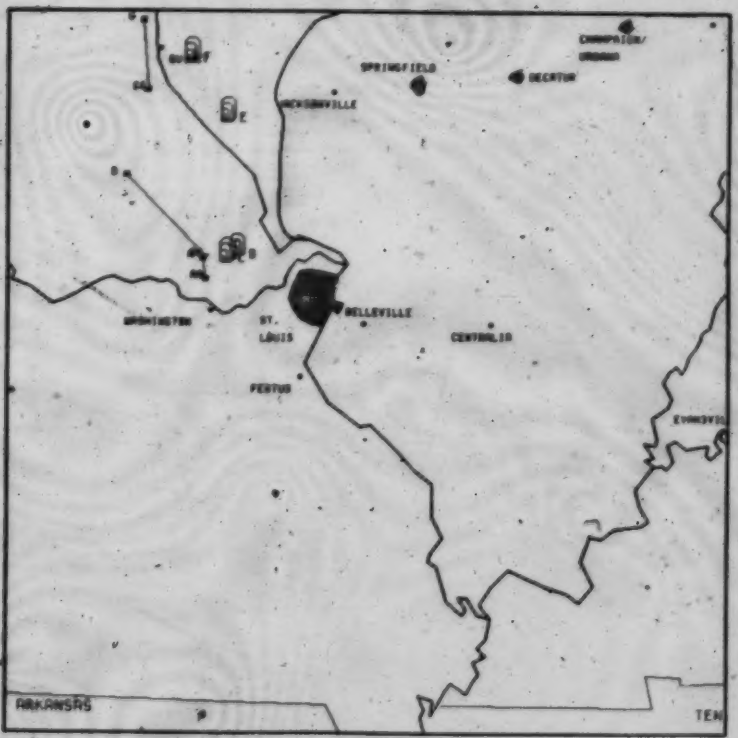
MAP 10

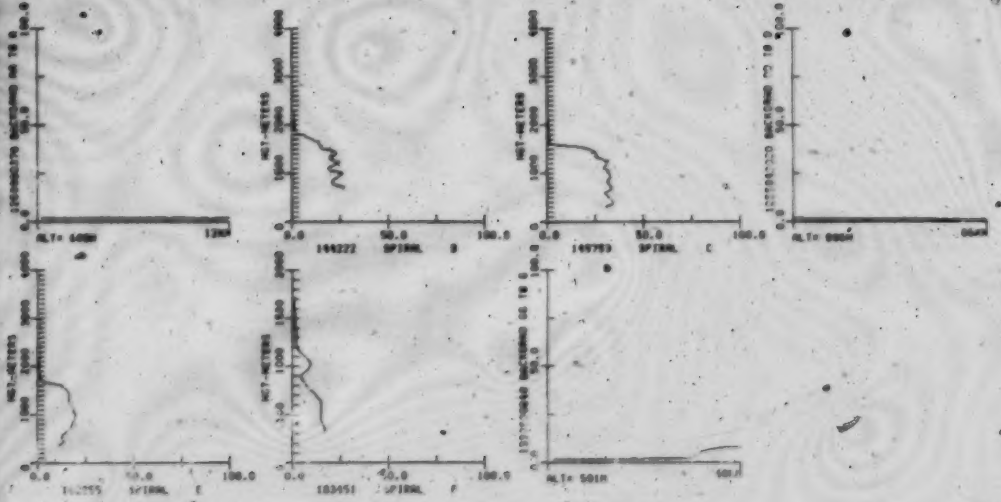


584 IN UC/M²

MAP 10

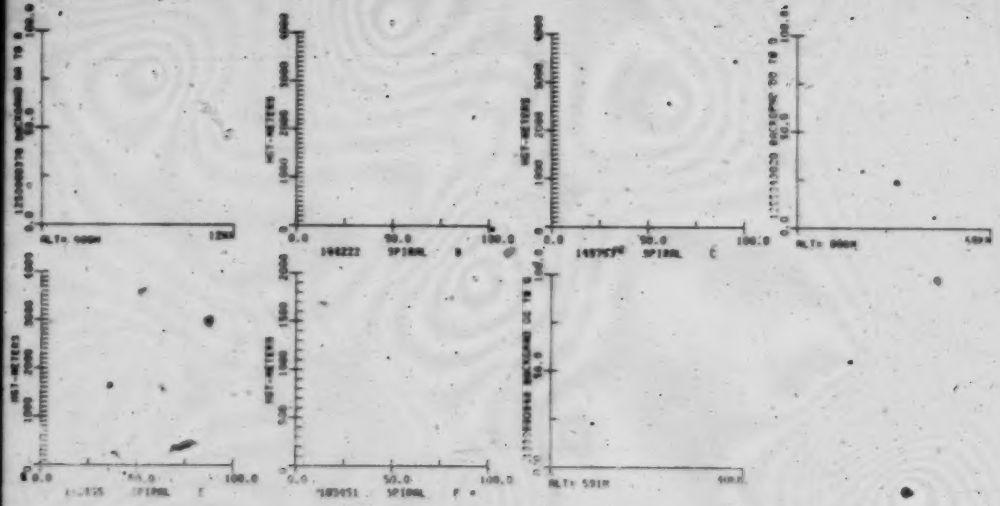
W76013.VØL 7-16-76 MAP 9





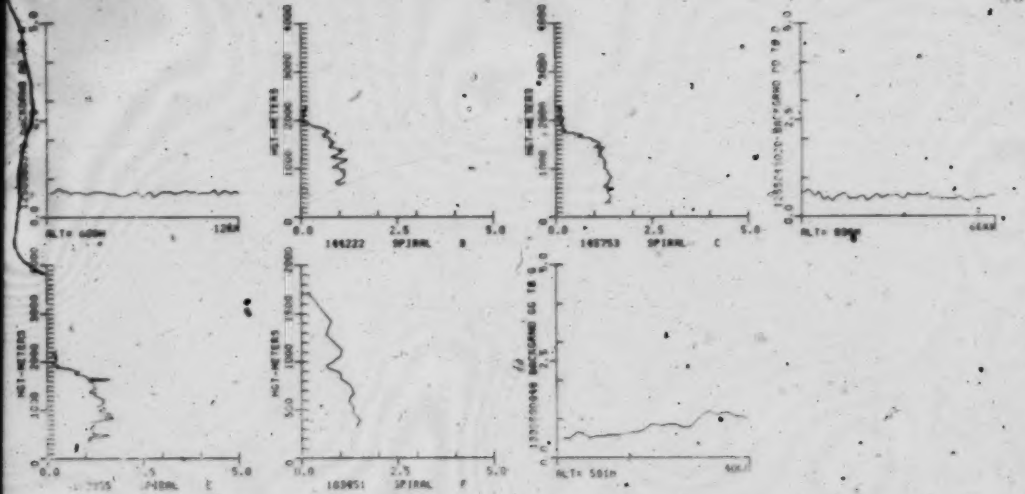
SO2 IN P.P.B.

MAP 9


HST-METERS
0.0
50.0
100.0
SPIRAL B
SPIRAL C
SPIRAL E
SPIRAL F
ALT= 591M

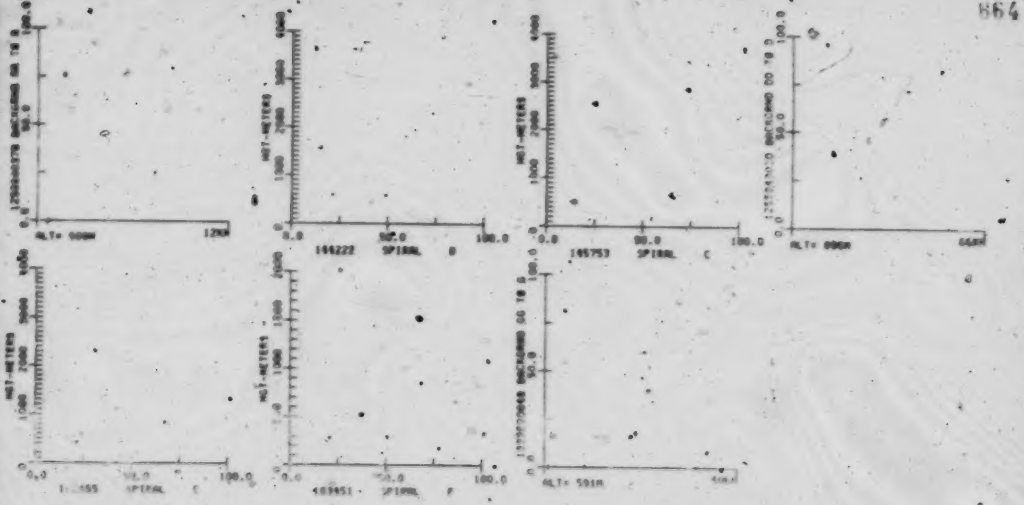
63 IN P.P.B.

MAP



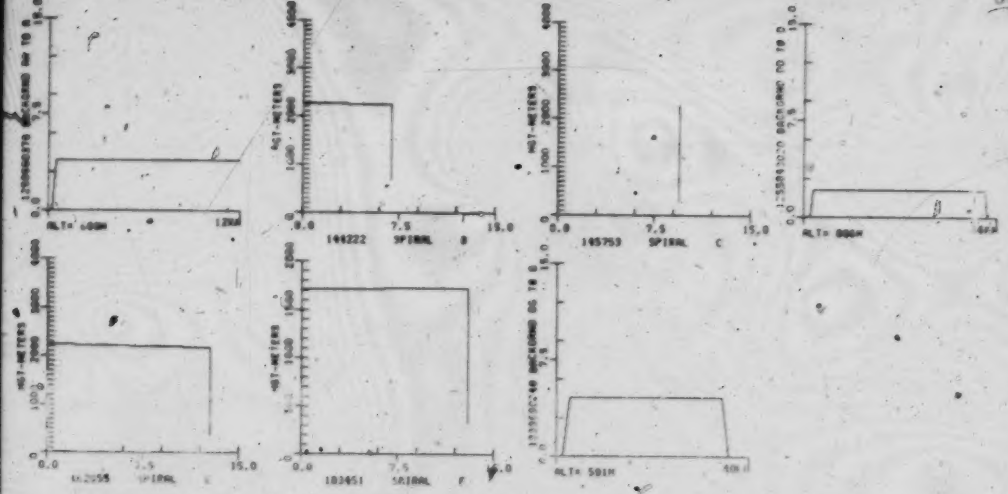
BSCAT IN 10^{-4} m^{-1}

MAP



CNC IN $10^3 CM^{-3}$ 0

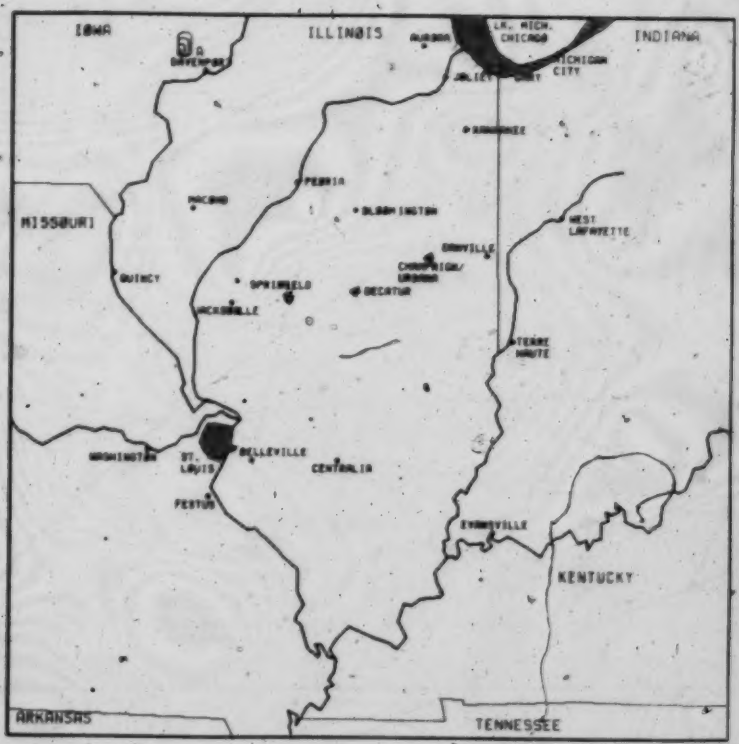
MAP 7

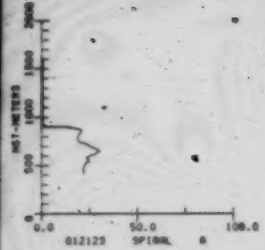


304 IN UC/M³

MAP

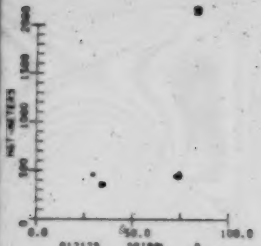
W76015.VØL 7-18-76 MAP 10





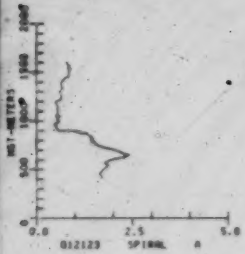
SØ2 IN P.P.B.

MAP 10



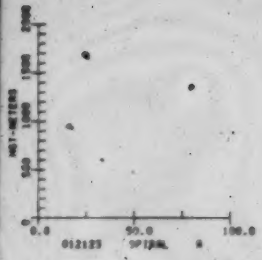
03 IN P.P.B.

MAP 10



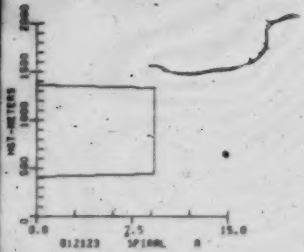
BSCAT IN $10^{-6}m^{-1}$

MAP 10



CNC IN $10^3 CM^{-3}$

MAP 10

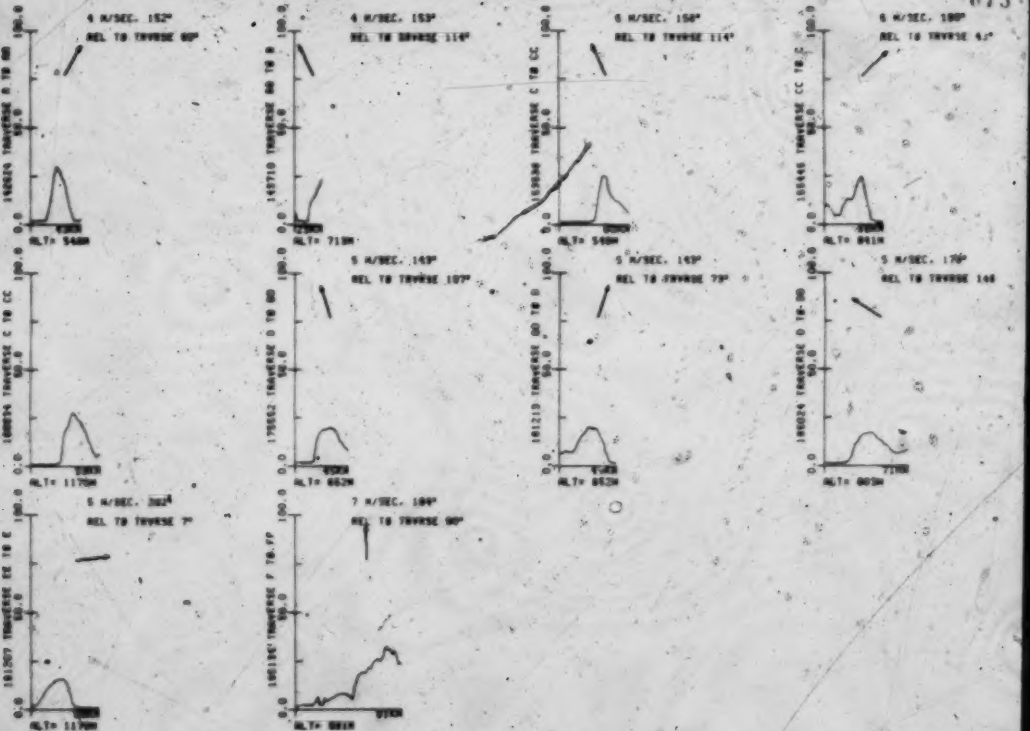


SR4 IN UC/M³

MAP 10

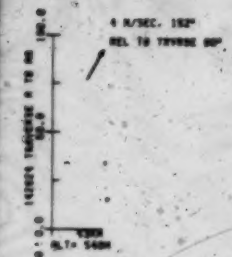
W76013.VOL 2-18-76

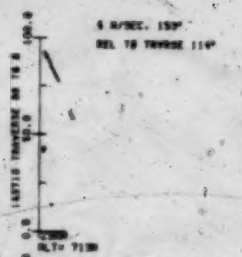
MAP 11

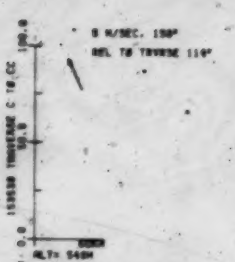


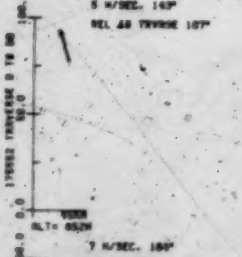
SO2 IN P.P.B.

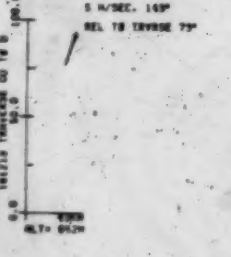
MAP 11

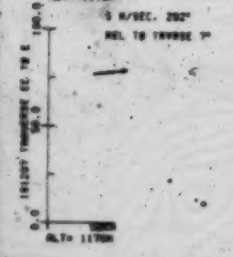






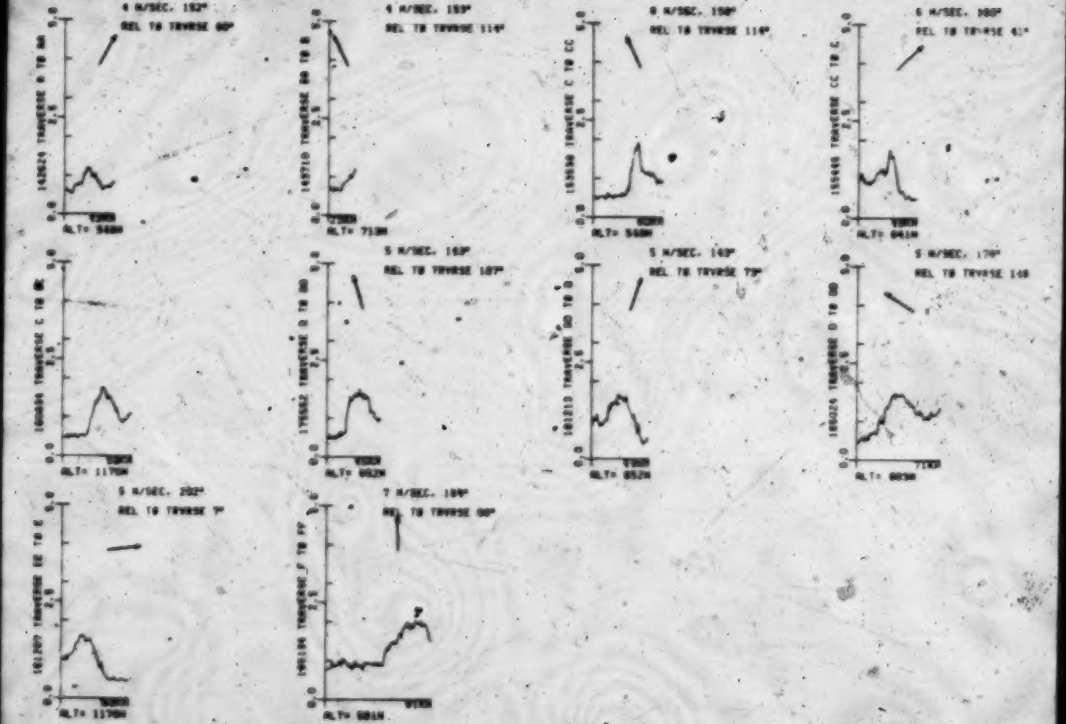




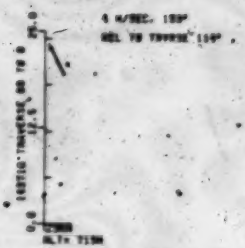


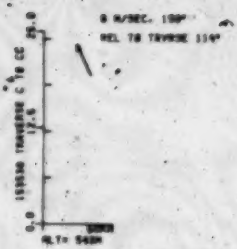
83 IN P.P.B.

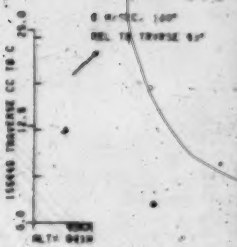
MAP 11

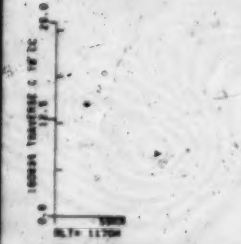

4 M/SEC. 152°
REL TO TRVRSE 60°
4 M/SEC. 159°
REL TO TRVRSE 114°
6 M/SEC. 158°
REL TO TRVRSE 114°
6 M/SEC. 308°
REL TO TRVRSE 63°
5 M/SEC. 165°
REL TO TRVRSE 107°
5 M/SEC. 140°
REL TO TRVRSE 73°
5 M/SEC. 170°
REL TO TRVRSE 148
5 M/SEC. 202°
REL TO TRVRSE 7°
7 M/SEC. 189°
REL TO TRVRSE 60°
BSCAT IN 10⁻⁵M⁻¹°

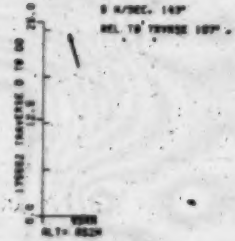
MAP 11

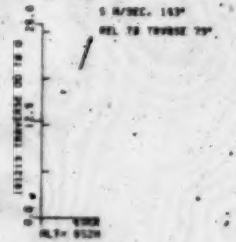


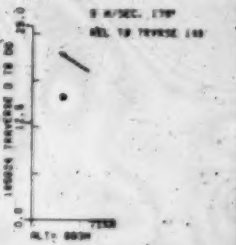


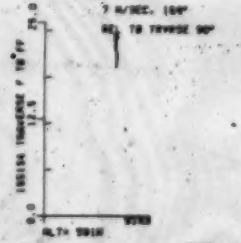






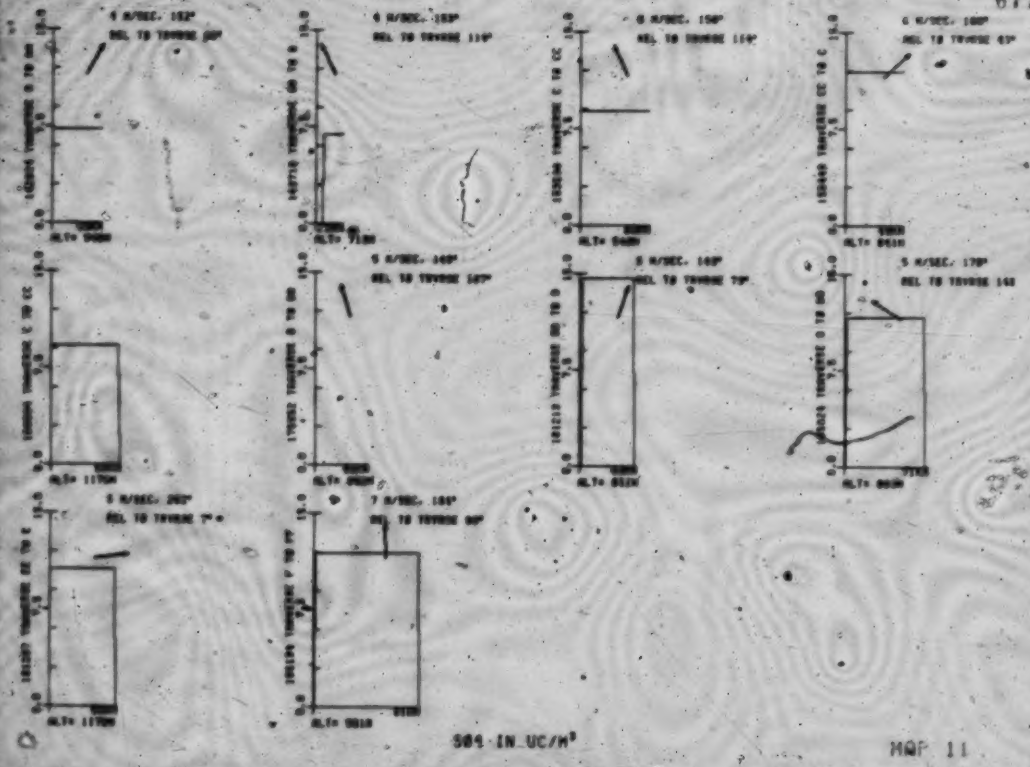




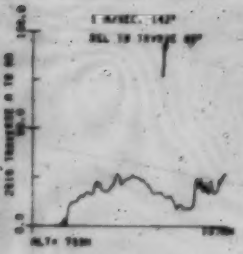


CNC IN $10^3 CM^{-3}$

MAP 11

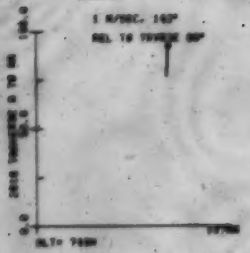

SO4 IN UG/M³
MQF 11

W76015.VOL 7-18-76 MAP 12



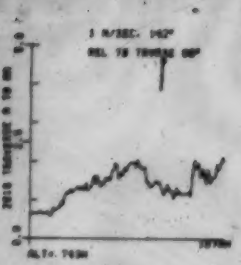
982 IN P.I.P.B.

MAP 12



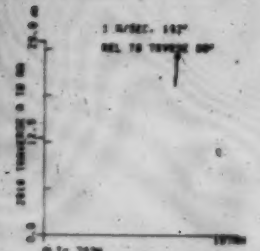
03 IN P.P.B.

MAP 12



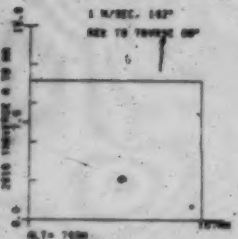
BSCAT IN $10^{-4}M^{-1}$

MAP 12



CNC IN $10^3 CM^{-3}$

MAP 1

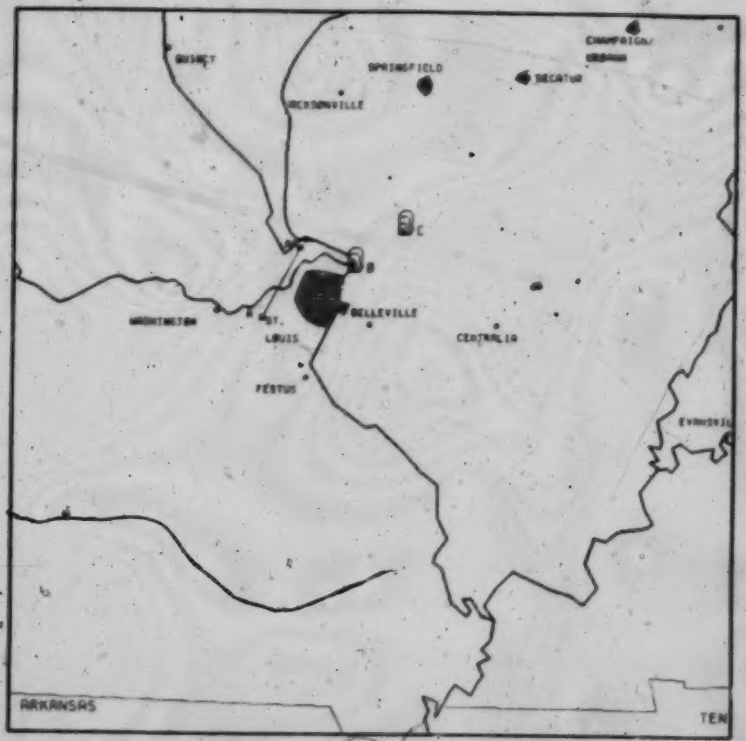


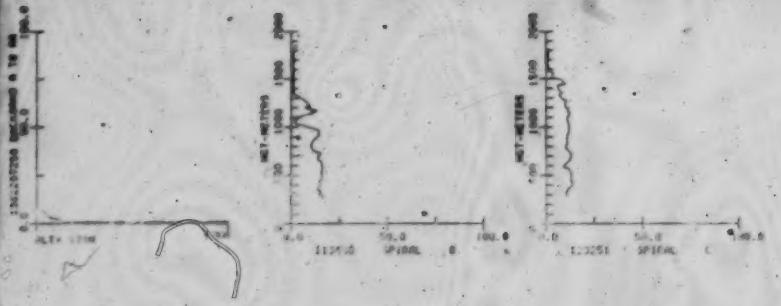
SR4 IN UC/M³

MAP 12

M76016.VBL 7-20-76

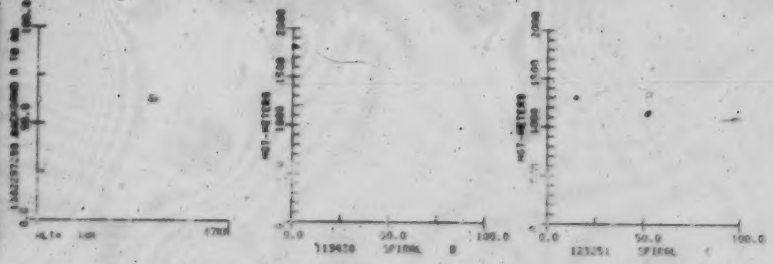
MAP 11



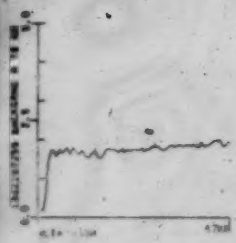


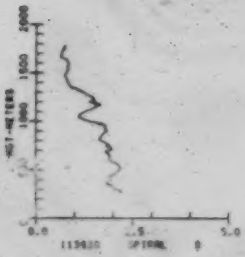
SO2 IN P.P.B.

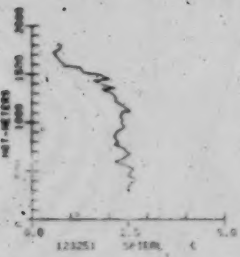
MAP 1



83 IN P.P.B.

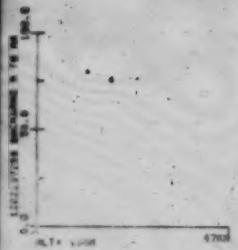


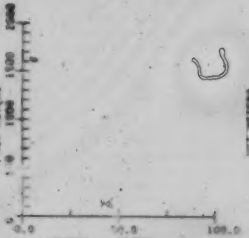


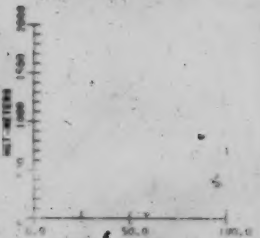


BSCAT IN $10^{-4}M^{-1}$

MAP 1

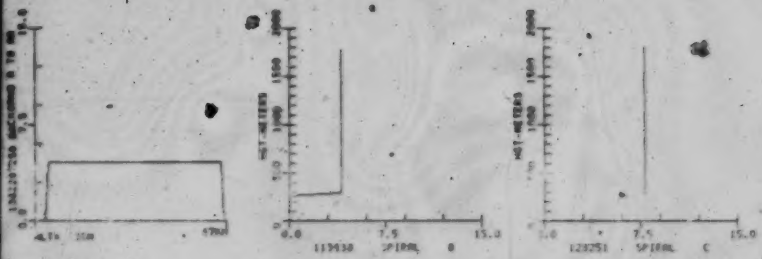






CNC IN $10^{18}CM^{-3}$

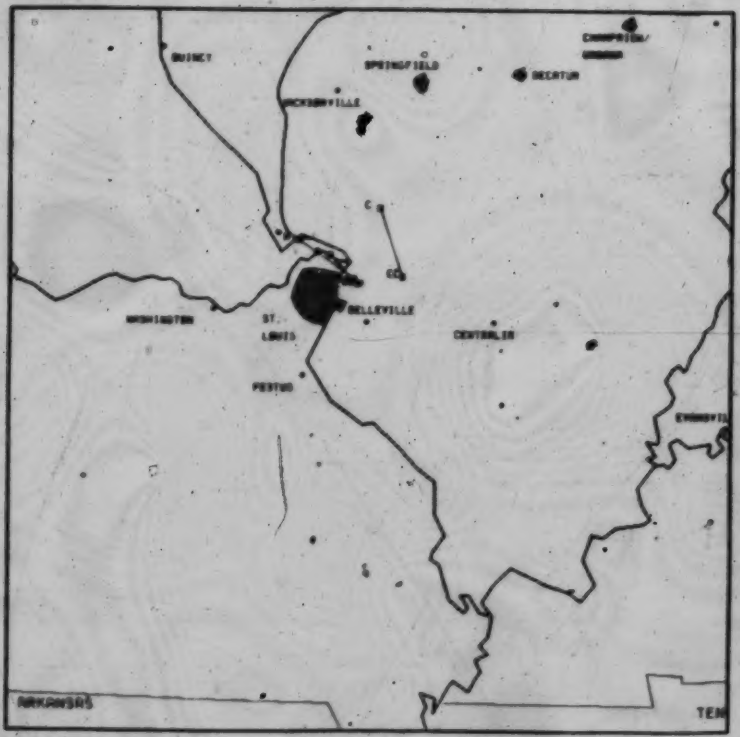
MAP 11

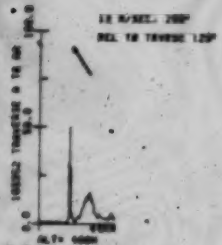


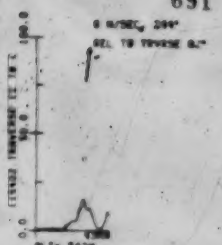
564 IN UC/M³

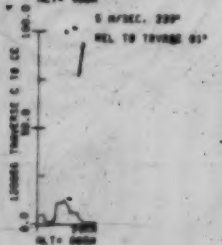
MET

W76016.VBL 7-20-76 MAP 13



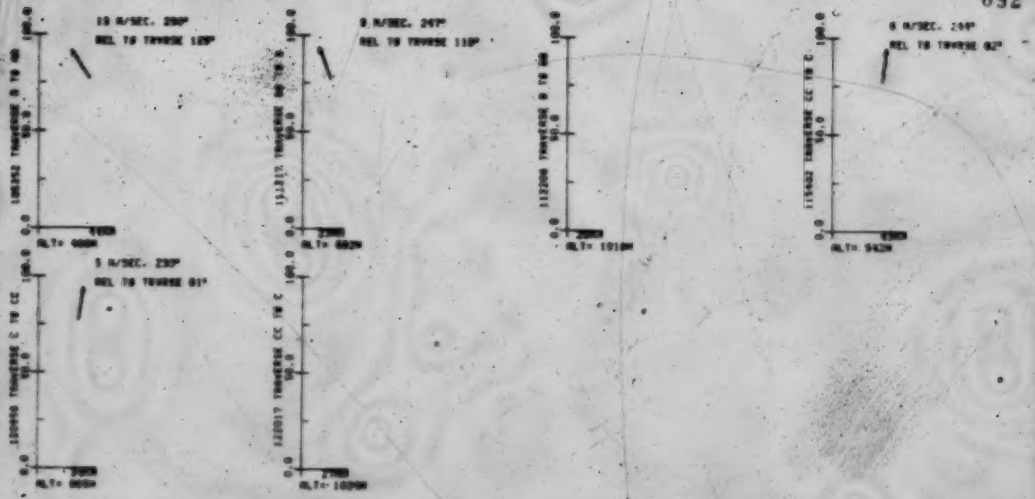






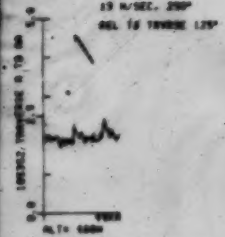
982 IN P.P.B.

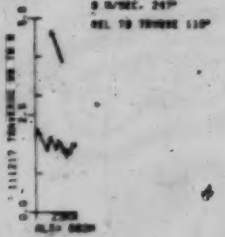
MAP 13

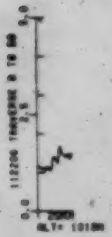


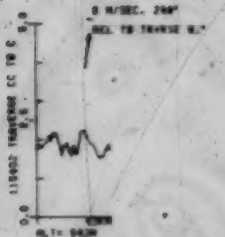
03 IN P.P.D.

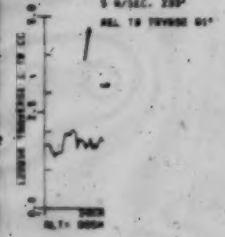
MAP 13

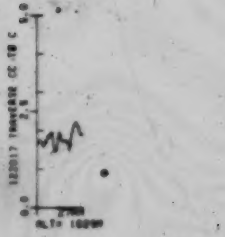






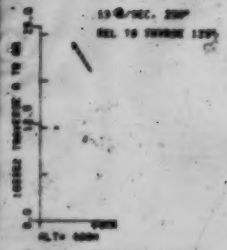


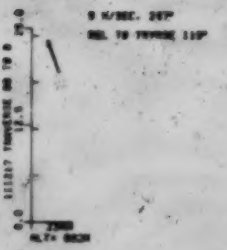


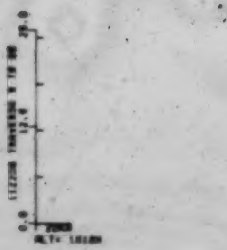


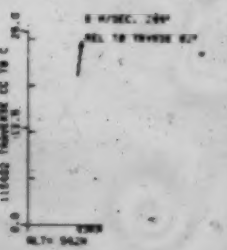
BSCAT IN 10^{-6} M^{-1}

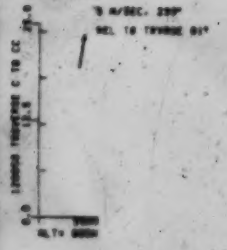
MAP 13

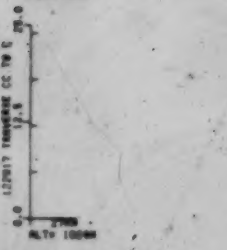






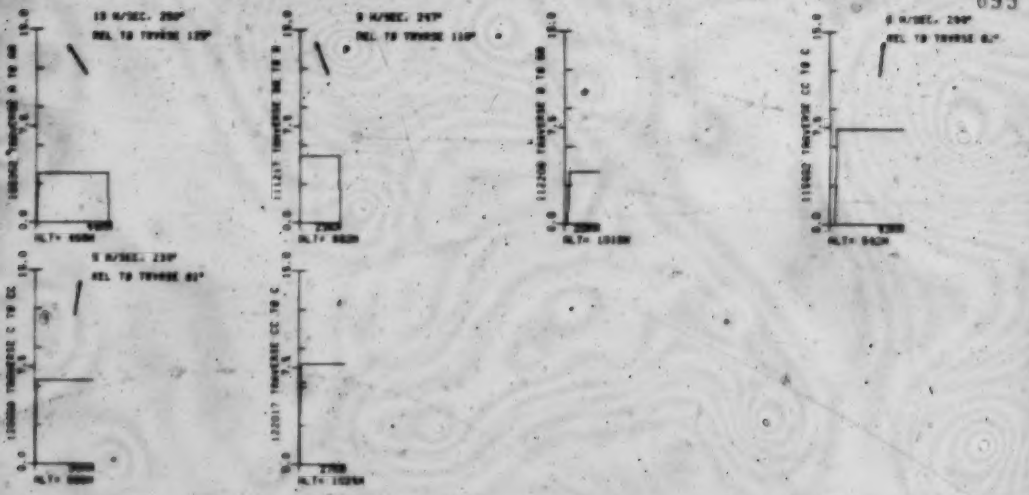






ΔNC IN $10^3 cm^{-3}$

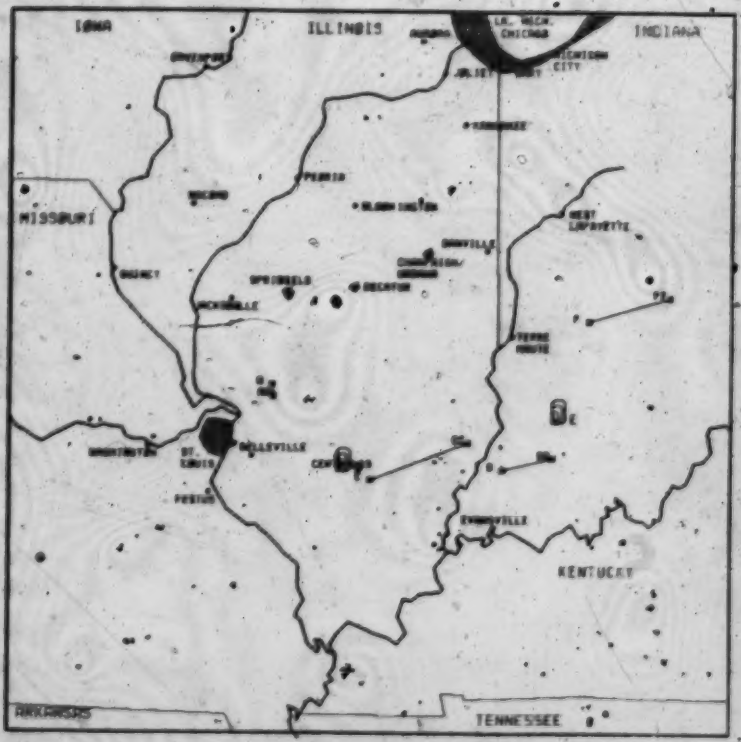
MAP 13

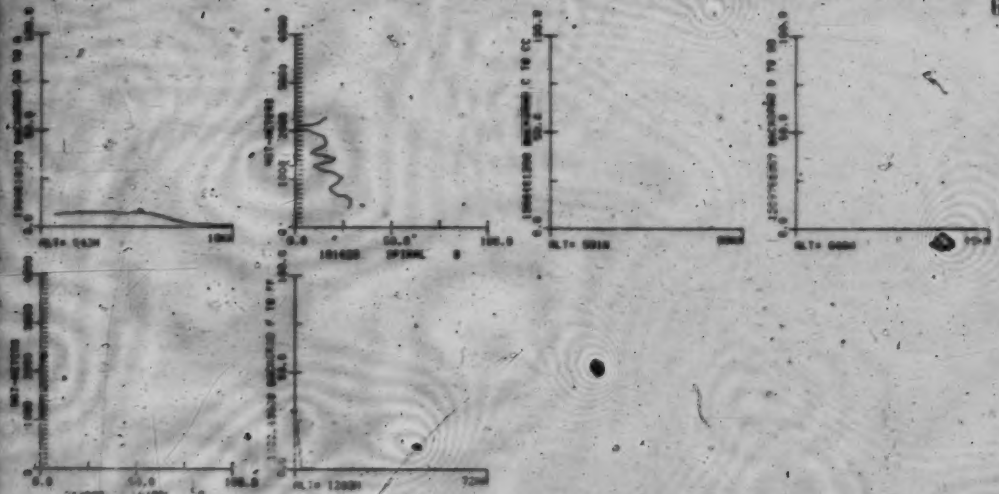


S04 IN UC/M²

MAP 15

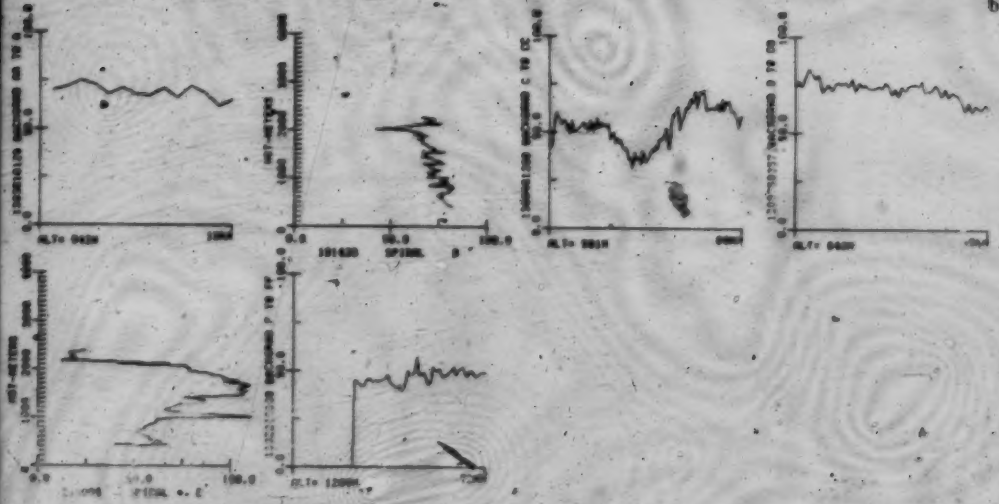
W76019.V8L 7-23-76 MAP 12





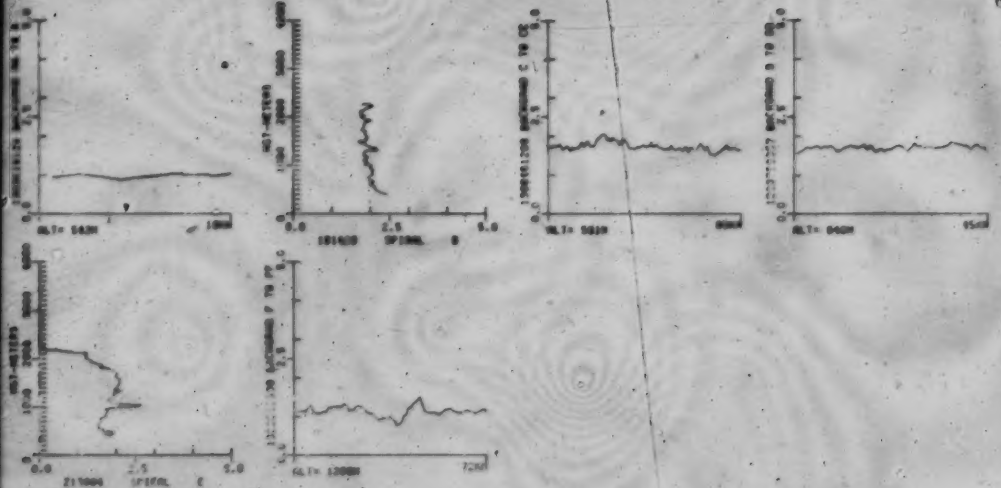
SBZ IN P.P.B.

MAP 12



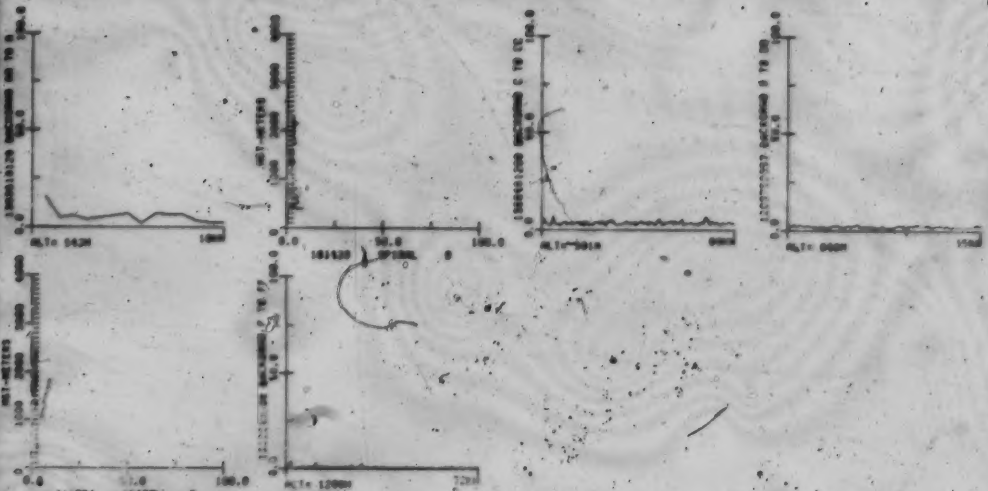
93 IN P.P.B.

MAP 12



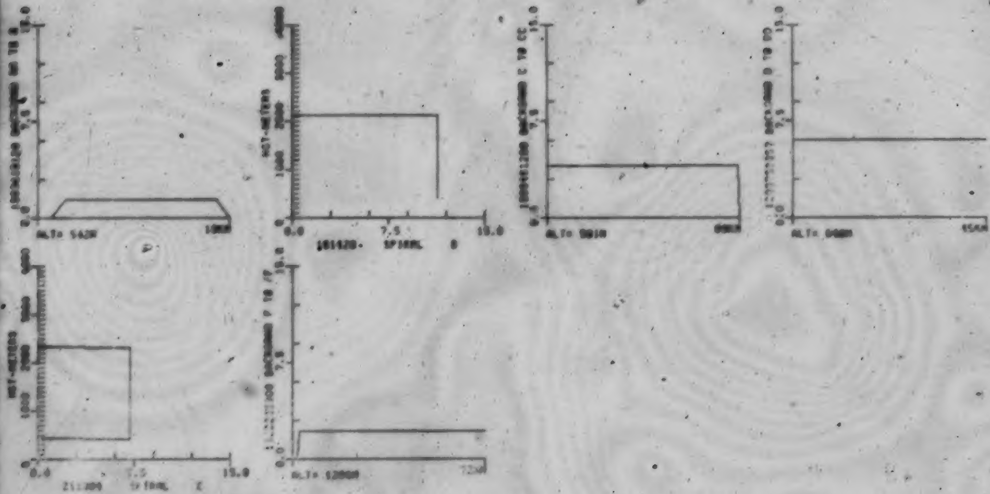
BSCAT IN $10^{-6}m^{-1}$

MAP 1?



CNC IN $10^9 CM^{-3}$

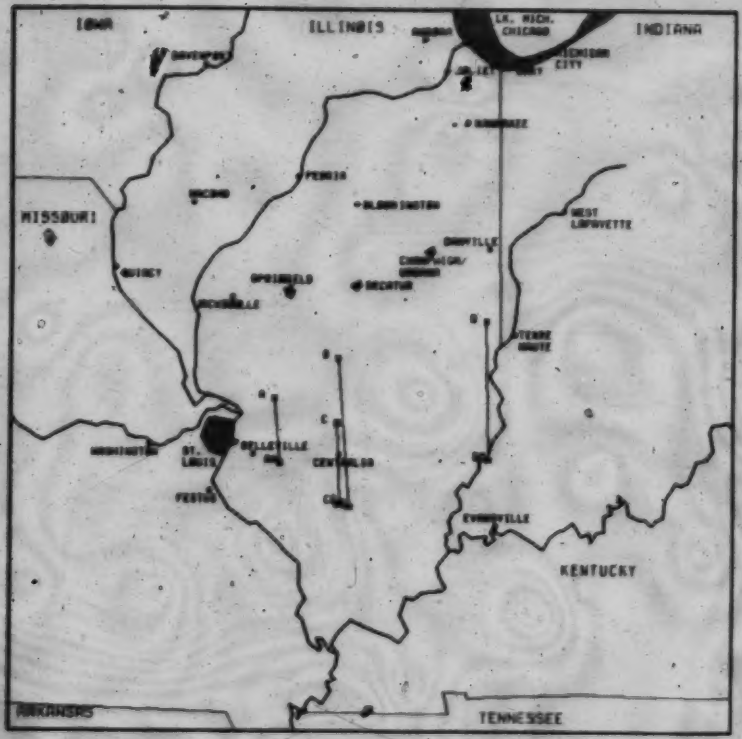
MAP 1

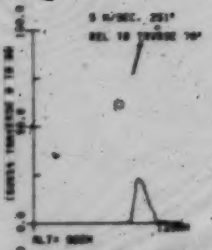


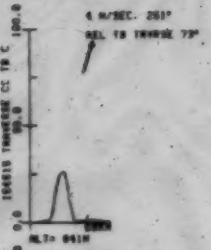
SO4 IN UG/M³

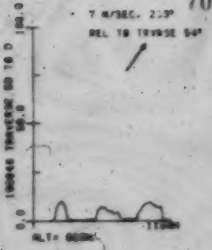
MAP 1

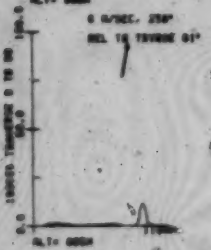
W76019 VOL 7-23-76 MAP 14

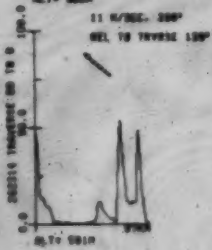


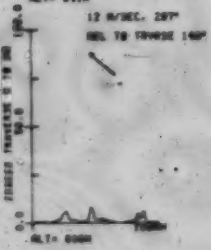






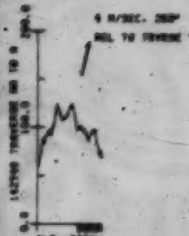


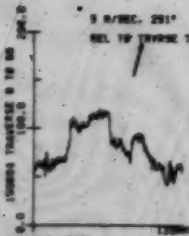


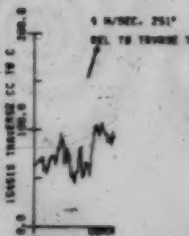


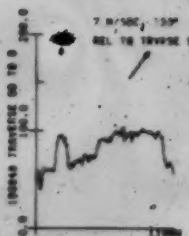
982 IN P.P.B.

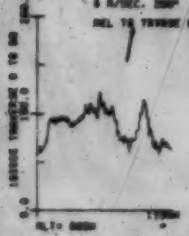
MAP 14

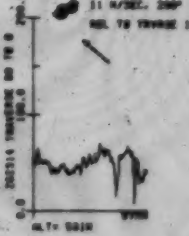


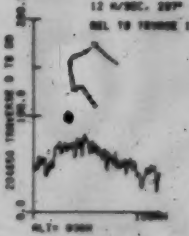






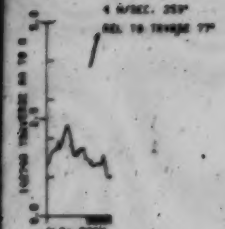


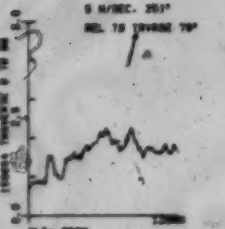


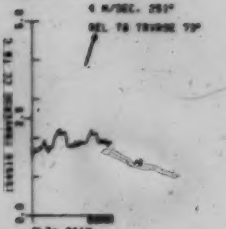


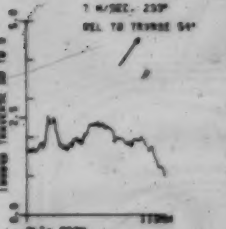
83-IN P.P.B.

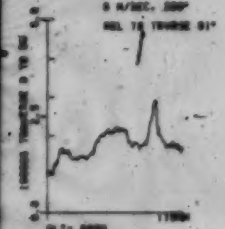
MAP 14

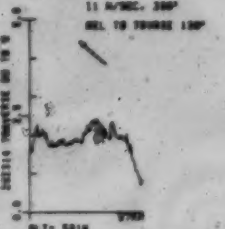


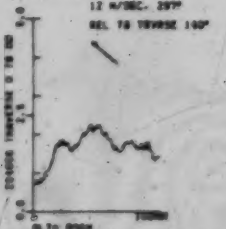






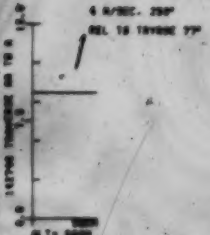


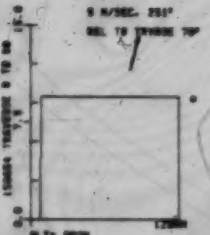


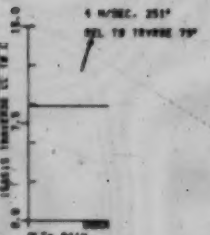


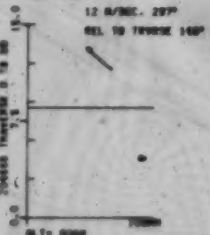
BSCAT IN $10^{-6}m^{-1}$

MAP 14



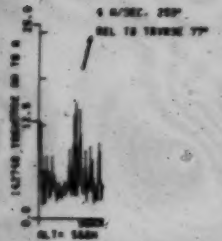


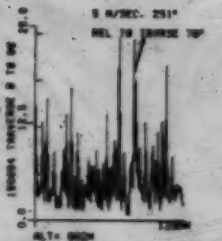


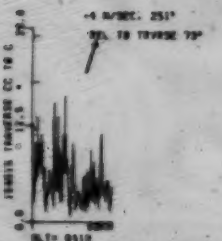


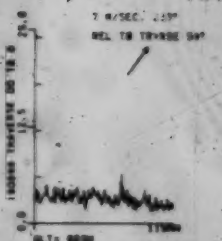
SR9 IN UC/M³

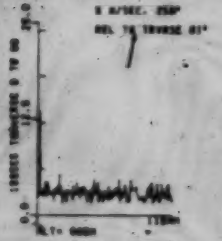
MAP 14

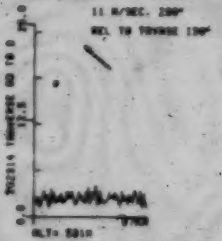


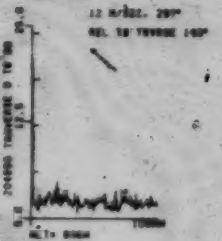










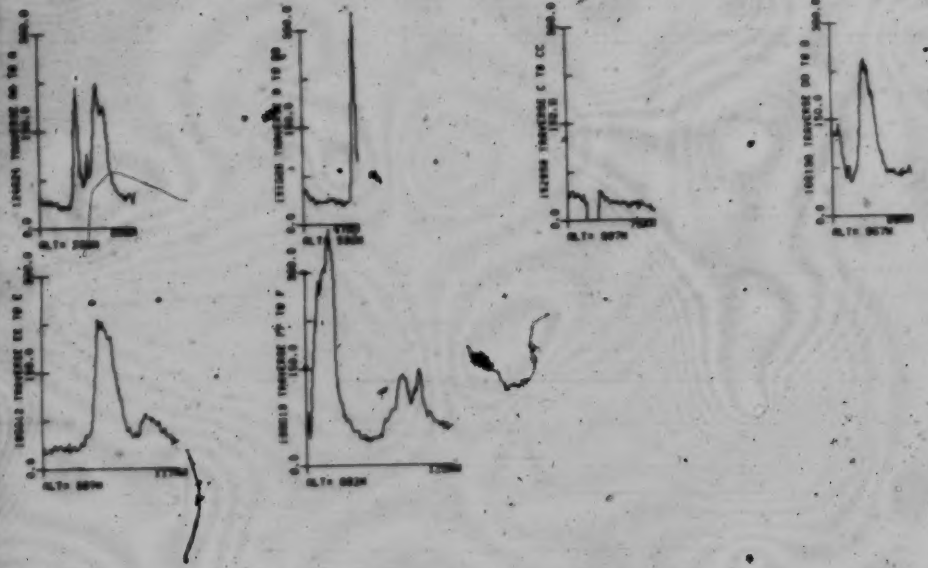


CNC IN $10^3 CM^{-3}$

MAP 14

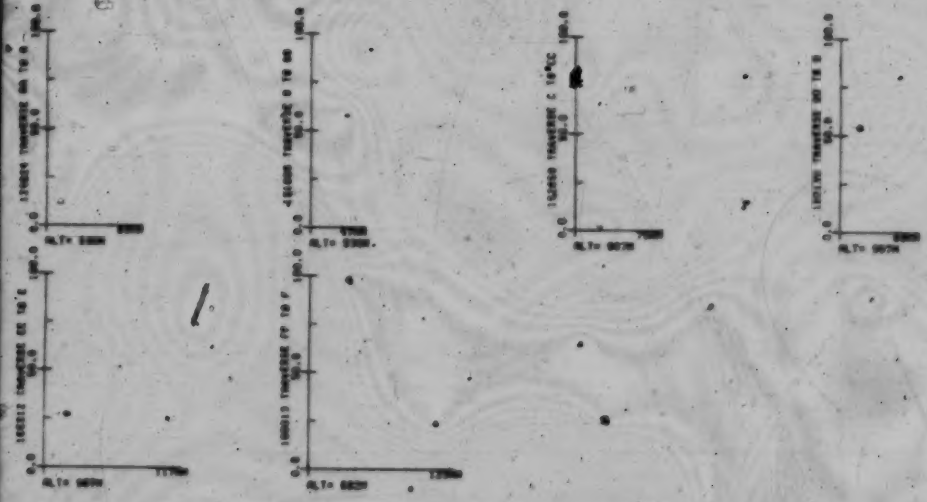
N76023.90L 8-3-76

MAP 15



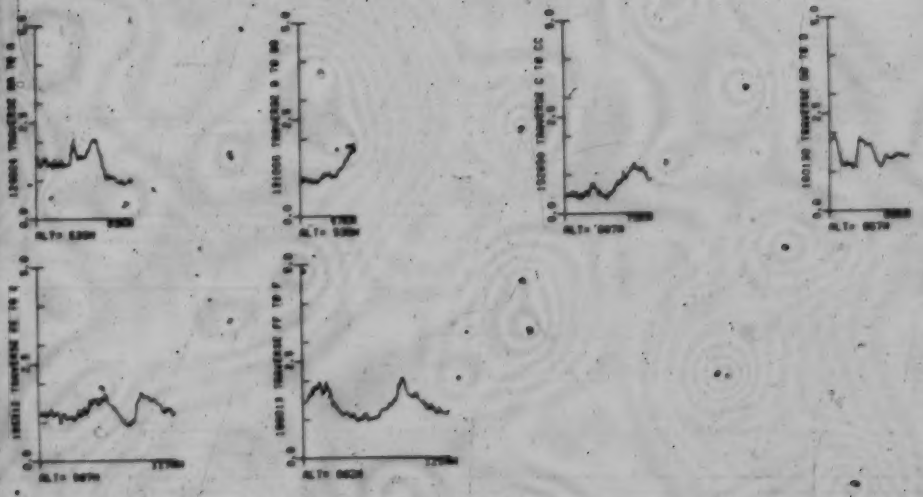
382 IN P.P.B.

MAP 15



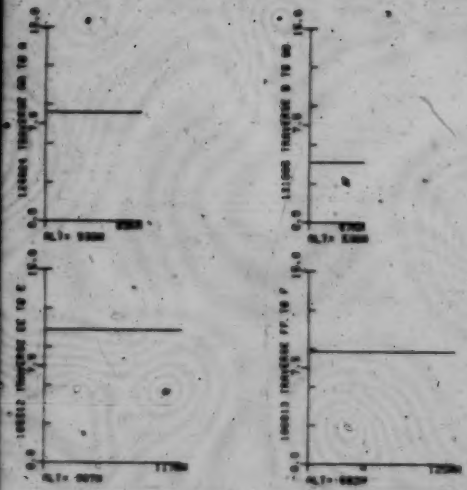
BS IN P.P.B.

MAP 15



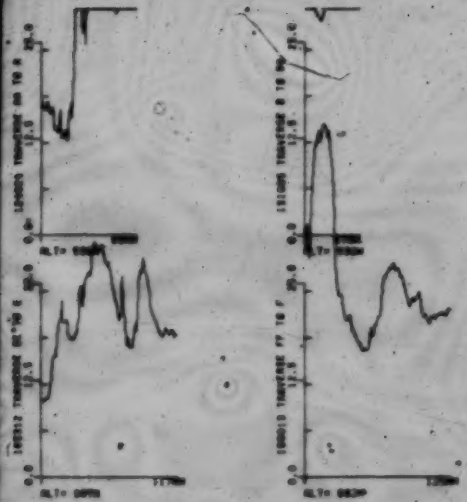
BSCAT IN $10^{-6}m^{-1}$

MAP_15



SR4 IN UC/M³

MAP 1



CNC IN $10^8 CM^{-3}$

MAP 15

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16. ABSTRACT
In this volume, all data collected by Meteorology Research, Incorporated and the University of Washington during the MISTT program are plotted. These include maps showing aircraft flight paths and graphs of data collected along the paths.

17. KEY WORDS AND DOCUMENT ANALYSIS

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INDEX

Description/Date	Document Pages	Fiche#	Starting Row & Column
Title, Index and Preface Pages	1-6	001	B-1
Part I - Meteorology Research, Incorporated Data	7	001	B-7
Map 1 602/7-1-76	8-39	001	B-8
Map 2 603/7-2-76	40-71	001	C-20
Map 3 605/7-5-76	72-103	001	E-12
Map 4 607/7-5-76	104-114	001	G-4
Map 4 609/7-7-76	115-125	001	G-15
Map 5 609/7-7-76	126-146	001	H-6
Map 5 613/7-14-76	147-157	001	I-7
Map 6 613/7-14-76	158-187	001	I-18
Map 7 614/7-14-76	188-208	001	K-8
Map 6 616/7-15-76	209-219	001	L-8
Map 8 616/7-15-76	220-230	001	L-20
Map 7 619/7-18-76	231-241	001	M-11
Map 8 620/7-18-76	242-252	002	B-4
Map 9 619/7-18-76	253-263	002	B-15
Map 9 621/7-18-76	264-274	002	C-8
Map 10 620/7-18-76	275-285	002	C-17
Map 11 621/7-18-76	286-296	002	D-8
Map 10 622/7-20-76	297-307	002	D-19
Map 12 622/7-20-76	308-329	002	E-10
Map 11 625/7-23-76	330-340	002	F-12
Map 12 626/7-23-76	341-351	002	G-3
Map 13 625/7-23-76	352-372	002	G-14
Map 14 626/7-23-76	373-383	002	H-15
Map 15 627/7-24-76	384-395	002	I-6
Map 13 632/7-26-76	396-406	002	I-18
Map 16 633/7-26-76	407-417	002	J-8
Map 14 634/7-27-76	418-428	002	J-20
Map 17 634/7-27-76	429-439	002	K-11
Map 15 635/7-28-76	440-450	002	L-2
Map 18 635/7-28-76	451-471	002	L-13
Map 19 636/7-28-76	472-482	002	M-14
Map 16 637/7-30-76	483-493	003	B-7
Map 20 637/7-30-76	494-514	003	B-18
Map 21 638/7-30-76	515-535	003	C-10
Part II - University of Washington Data	536	003	D-20
Map 1 6-27-76	537-548	003	E-1
Map 2 7-5-76	549-554	003	E-12
Map 3 7-5-76	555-560	003	E-18
Map 2 7-5-76	561-566	003	F-6
Map 3 7-7-76	567-572	003	F-11
Map 4 7-7-76	573-583	003	F-17
Map 4 7-9-76	584-589	003	G-6
Map 5 7-9-76	590-600	003	G-14

Description/Date		Document Pages	Fiche #	Starting Row and Column
Map 5	7-9&10-76	607-606	003	H-6
Map 6	7-9&10-76	607-612	003	H-11
Map 6	7-12-76	613-618	003	H-17
Map 7	7-12-76	619-624	003	I-2
Map 8	7-13-76	625-630	003	I-8
Map 7	7-14-76	631-636	003	I-14
Map 9	7-14-76	637-642	003	J-1
Map 8	7-15-26	643-648	003	J-7
Map 10	7-15-76	649-654	003	J-13
Map 9	7-15-76	660-665	003	K-4
Map 10	7-15-76	666-671	003	K-10
Map 11	7-16-76	672-677	003	K-16
Map 12	7-16-76	678-683	003	L-2
Map 11	7-20-76	684-689	003	L-8
Map 13	7-20-76	690-695	003	L-14
Map 12	7-23-76	696-701	003	L-20
Map 14	7-23-76	702-707	003	M-6
Map 15	8-3-76	708-713	003	M-12
Form 2220-1		714	003	M-18